



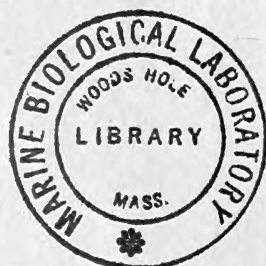


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CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

VOLUME 8

1965



Compiled by

F.A.O. Fisheries Biology Branch

Editor

ERDOĞAN F. AKYÜZ

Assistant Editor

HILDE BERNABEI



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THE FOOD AND AGRICULTURE ORGANIZATION OF THE
UNITED NATIONS

by

TAYLOR & FRANCIS LTD.,

RED LION COURT, FLEET STREET, LONDON, E.C.4, ENGLAND

Made and printed in England by

WARREN & SON LTD.

(a subsidiary company of Taylor & Francis Ltd.)

THE WYKEHAM PRESS WINCHESTER



CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

World List Abbreviation: *Curr. Bibliogr. aquat. Sci. Fish.*

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CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

VOLUME 8—EXPLANATION OF COVERAGE ARRANGEMENT

9. ERRATA AND ADDENDA TO "EXPLANATION OF COVERAGE AND ARRANGEMENT" (contd.)

3. REFERENCES

Delete the previously amended second paragraph and enter the following in its stead:

"Each entry consists of a reference (including titles) and indicative annotation, an entry number of 6 digits for series 57-, 58-, 59-, and 60- and 7 digits for series 61- and 62-; the first two digits of which refer to the year of accession to this Bibliography (not to the year of publication of the document cited). Starting from Volume 8, the entry numbers follow a numerical sequence only in the parts in which they are entered, but do not follow any sequence in the entire volume. The digit(s) preceding the hyphen refer to the volume number, followed by a 5-digit number the first 2 digits of which indicate the part number, the remaining 3 digits being the true entry number of the reference entered in a part,

e.g. 8 - 01 364 "

$\underbrace{\hspace{1.5cm}}$ $\underbrace{\hspace{1.5cm}}$ $\underbrace{\hspace{1.5cm}}$

 Volume Part Entry number

 in part

3.1 Authors

Names and Abbreviations of Organizations and Projects

Insert in alphabetic order the following:

CCCAS	..	see SEASCO
CEPAL	..	see ECLA
COI	see IOC (UNESCO)
ECLA (UN)	..	Economic Commission for Latin America (UN)
		Comisión Económica para America Latina (UN)
IABO (IUBS)	..	International Association of Biological Oceanography
		(International Union of Biological Sciences)
IAMS	International Association of Microbiological Societies
		Société Internationale de Microbiologie
		Asociación Internacional de las Sociedades de
		Microbiología
JFRCA	..	Japanese Fisheries Resource Conservation Association
NEAFC	..	North East Atlantic Fisheries Commission
		Commission des Pêcheries du Nord-Est Atlantique

- | | | |
|----------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SCTR/OAU | .. | Scientific Commission for Techniques and Research.
Organization of African Union
Commission Scientifique, Technique et de la Recherche.
Organisation de l'Unité Africaine |
| SCIBP | .. | Special Committee, International Biological Programme |
| SEASCO | .. | South East Asia Science Cooperation Office
Poste de coopération scientifique pour l'Asie du Sud-Est
Centro de Cooperación Científica de Asia Sudoriental |

Insert under IOC (UNESCO) the following French name to follow the present English name:

Commission Océanographique Intergouvernementale

5. INDEXES

5.1 *Author*

In amended version of paragraph one, line two, correct:

“ Marine Library Association ”

to read

“ American Library Association ”.

CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

VOLUME 8—EDITORIAL NOTE

It is with great regret that we announce that, as from 1st July 1965 and until further notice, the Aquatic Sciences Information Retrieval Center will not be able to undertake computer searches of indexed literature (see Editorial Notes 3 (3) : N 2-3).

It is hoped that means will eventually be found to revive and develop this service.

8:N2

CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

VOLUME 8—ADDENDA

8-001ad to 8-029ad

- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (3). 8-001ad
(61-04691)
- Footnote:* Issued also as: *Bull. Sea Fish. Res. Sta., Haifa*, (31). 8-002ad
(61-07951)
- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (5). 8-003ad
(61-10150)
- Original title:* Sravnitel'naia biokhimicheskaiia kharakteristika 8-004ad
nekotorykh presnovodnykh bespozvonochnykh i ryb (61-12526)
- Original title:* Ocherk flory vodoroslei zapovednika Kemeru. 8-005ad
(Rizhskii zal. v Lat. SSR) (61-13033)
- Original title:* Soderzhanie mineral'nykh elementov v miase ryb 8-006ad
(62-00444)
- Annotation:* Contains an annotated list of species, comments 8-007ad
regarding seasonal population dynamics, size ranges, ecological (62-03272)
requirements of preferences.
- Reference:* *Zool. Jb. allgem. Zool.*, 69 (15/7) : 63-94 8-008ad
- Original title:* Lernkapazität, Gedächtnis und Transpositions- (62-04476)
vermögen bei Forellen
- Reference:* 306-12 8-009ad
- Original title:* Die Photosynthese von Meerespflanzen in ihrer (62-05874)
Beziehung zum Salzgehalt
- Author:* & R. Moav 8-010ad
(62-06131)
- Footnote:* Abstract only. 8-011ad
(62-06468)
- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (7). 8-012ad
(62-02188)
- Footnote:* Issued also as: *Mar. Repr. Mar. Lab., Aberdeen*, (209). 8-013ad
(8-04003)
- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (4). 8-014ad
(8-04237)
- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (6). 8-015ad
(8-04380)

<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab., Aberdeen</i> , (189).	8-016ad (8-05115)
<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab., Aberdeen</i> , (190).	8-017ad (8-05120)
<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab. Aberdeen</i> , (191).	8-018ad (8-05138)
<i>Original title:</i> Mineral'nyi sostav nekotorykh vidov ryby i proverka sootnosheniia nezhdou soderzhaniiem mineral'nykh elementov i belka	8-019ad (8-09281)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (124).	8-020ad (8-10402)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (93).	8-021ad (8-10407)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (102).	8-022ad (8-10410)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (98).	8-023ad (8-10415)
<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab., Aberdeen</i> , (186).	8-024ad (8-11038)
<i>Footnote:</i> Issued also as: <i>Bull. Sea Fish. Res. Sta., Haifa</i> , (31).	8-025ad (8-11144)
<i>Footnote:</i> Issued also as: <i>Aust. Fish. Leaflet</i> , (8).	8-026ad (8-11181)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (84).	8-027ad (8-11283)
<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab., Aberdeen</i> , (199).	8-028ad (8-12083)
<i>Author:</i> G. Wohlfarth & M. Lahman	8-029ad (62-03937)

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Rep. cent. Inst. Fish. Technol., Ernakulam, 1961-1962 : 65 p. 8-01003

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Monaco, 49 p. 8-01004
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Report of the IHB Activities Committee appointed by the 7th International Hydrographic Conference (report dated April 1960)

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Introduction to mammalogy

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NE B. Curtis, 1949. Covers the evolution of the fish, its physiology, surface, skeleton, vision, hearing, equilibrium, temperature sense, pain, nervous system; the digestive, breathing, excretory, and circulatory systems; courtship, mating, care of young; and similar phenomena. The salmon and trout are singled out for a special chapter, while relevant information is given about many game fish.

Fraenkel, G. S. & D. L. Gunn (1961)
 New York, Dover Publ., 376 p.

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The orientation of animals: kineses, taxes and compass reactions

NE Fraenkel, G. S. & D. L. Gunn 1940. A general review of concepts, theory and experiment on this subject, with many references to literature and original work on aquatic forms. Bibliographic and systematic subject indexes. Appendix gives additional notes, added Dec. 1960.

Canada. Department of Fisheries (1961)
Rep. Dep. Fish. Can., 30, 1959 : 94 p.

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Contains 8-01016, 8-01023, 8-01201, 8-01202, 8-01203, 8-01279, 8-01280, 8-01310, 8-01373 to 8-01379, 8-01468, 8-01469, 8-01470, 8-01523 to 8-01528 and 8-01551.

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- Larson, J. S. (1962) F**
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 Re 8-01045.

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En 8-01489 and 8-01140. Descriptors: irrigation systems, dams, water supplies, fishes, fisheries, production, sewage purification, sanitary engineering. Available from the Office of Technical Services, Washington, D.C.

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 The International Phycological Society

Brief view of recent steps taken to improve cooperation in the field of phycology, and gives the origin and scope of the new society.

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Phycologia, 1 (1) : 4-7 8-01051
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Lists existing phycological societies, with brief notes on their origins, scopes and activities; publications and officers.

G
8-01052**Wynne-Edwards, V. C.** (1962)

London, O. & B., 653 p.

Animal dispersion in relation to social behaviour

Exposition of largely novel theory ascribing to much social behaviour in all groups of animals the function of maintaining population density below starvation level.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

M

France. Comité Central d'Océanographie et d'Étude des Côtes (1961) 8-01053*Cah. océanogr.*, 13 (9) : 607-79

Contains sections on general information, technical notes: 62-06403, 62-06404 and 8-01054; documentation received by secretariat, and tables and diagrams of observations: 8-01055.

M

Raison, J. P. (1961)

8-01054

Cah. océanogr., 13 (9) : 636-51

La falaise et l'estran rocheux du Cap d'Alprech (Pas-de-Calais) (The cliff and the rocky strand of Cape d'Alprech (Pas-de-Calais))

Describes the general stratigraphy and tectonic.

M

Anon. (1961)

8-01055

Cah. océanogr., 13 (9) : 667-79

Résultats d'observations (Results of observations)

Various observations made by French navy vessels during 1960 in the Coral Sea, Tasmanian Sea and South Pacific. Tables of data on temperature and salinity.

M

Anon. (1962)

8-01056

Science, 136 (3515): 561-79

New products

Incl. note—p. 572—on new oceanographic data-recording capsule produced by Edgerton, Germeshausen & Grier, USA.

M

Assur, A. (1960)*

8-01057

Wilmette, Ill., Army Cold Regions & Engng Lab., 58 p.

Composition of sea ice and its tensile strength

M

Alkire, H. L. (1962)

8-01058

Chesapeake Sci., 3 (1) : 50

Atlantic hurricanes

Re 8-01333

Eriksson, E. (1962)
Deep-Sea Res., 9 : 1-9
 Oceanic mixing

M
 8-01059

Model of ocean circulation presented which accounts both for the actual features of the circulation of sea-water as closely as possible and for the actual distribution of phosphorus, oxygen and carbon-14 in surface, intermediate and deep water. Model makes it possible to evaluate transport by gravity from sea surface of various elements in sinking particulate matter.

Wyrski, K. (1962)
Deep-Sea Res., 9 : 11-23

M
 8-01060

The oxygen minima in relation to ocean circulation

Distribution of oxygen in the ocean, as it is influenced by consumption and circulation, is discussed, and discrepancies in earlier theories are resolved. Curves of vertical distribution of oxygen in oxygen minimum layer are calculated and compare well with observations. It is concluded that oxygen minimum layer is caused by biochemical process of oxygen consumption, that its position and distribution are determined by circulation, and that shape of oxygen profile, especially high position of its minimum, is due to exponential decrease of oxygen consumption.

Ratray, M., Jr. (1962)
Deep-Sea Res., 9 : 25-37

M
 8-01061

Interpolation errors and oceanographic sampling.

Formulae are derived which can be used to give an interpolated value for an oceanographic variable and to estimate the accuracy of the interpolation. Utilization of these permits determination of optimum sampling programmes which, with a minimum number of observations, yield the distribution of a variable to a prescribed accuracy.

Steele, J. H. & D. W. Menzel (1962)
Deep-Sea Res., 9 : 39-49

M
 8-01062

Conditions for maximum primary production in the mixed layer

Theoretical relations are developed which determine primary production and chlorophyll *a* concentration in terms of the depth of the mixed layer and a factor $f(N)$ for the effects of nutrient limitation. General consequences of variations in depths of mixed layer are discussed and theory is applied in detail to data from Sargasso Sea off Bermuda.

Worthington, L. V. (1962)
Deep-Sea Res., 9 : 51-67

M
 8-01063

Evidence for two gyre circulation system in the North Atlantic

Gulf Stream, as it passes the southern extremity of the Grand Banks, transports water whose oxygen density relationship closely resembles the Sargasso Sea average established by Richards & Redfield, 1955. It is suggested that Gulf Stream does not turn to northward after passing the Grand Banks but continues to flow in a southeasterly direction, and that the currents which pass the Flemish Cap are part of a separate, northerly gyre. Water budget consistent with distribution of oxygen is presented.

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Deep-Sea Res., 9 : 69-72
 Sound-scattering layers and their relation to thermal structure in the Strait of Gibraltar
- During two summer cruises of Woods Hole Oceanographic Institution ships, 'Yamacraw' (1958) and 'Chain' (1959), authors made study of thermal microstructure in Strait of Gibraltar. It was noticed on P.G.R. records that concentration, level and appearance of sound scatterers were related not only to changes in illumination but also to the positions and oscillations of certain isotherms on C.T.R. traces.
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- Cronin, L. E., J. C. Daiber & E. M. Hulbert** (1962) MF
8-01169
Chesapeake Sci., 3 (2) : 63-93
 Quantitative seasonal aspects of zooplankton in the Delaware River estuary
 Estuary sampled for net zooplankton at quarterly intervals over a two-year period. Principal spp. were counted from 20-foot depth intervals and for 13 channel stations distributed from the Atlantic Ocean to fresh water. Accompanying hydrographic data were taken on salinity, temperature, dissolved oxygen, and surface transparency.
- Stephens, G. C. & N. S. Kerr** (1962) MF
8-01170
Nature, Lond., 194 (4833) : 194-5
 Uptake of phenylalanine by *Tetrahymena pyriformis*
- Gonzales, A. B.** (1961) MF
8-01171
Philipp. J. Sci., 90 (3) : 297-331
 Studies on the seasonal distribution of phytoplankton of Tadalak Lake, Los Baños, Laguna, Luzon Island, Philippines
- Desikachary, T. V.** (1961?) MF
8-01172
Proc. Summer Sch. Bot. Darjeeling, 1960 : 69-76
 Biology of phytoplankton
 BSEA 8 (7) 4108.

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- Leedale, G. F.** (1962) MF
Nature, Lond., 194 (4834) : 1133-4 8-01173
Euryhaline euglenoid flagellates

Re 62-03091.

- Lytle, C. F.** (1962) F
Tulane Stud. Zool., 9 (5) : 309-14 8-01174
Craspedacusta in the southeastern United States

Distribution of freshwater medusa is reviewed and extended by 10 new locality records. Specimens from 12 localities were studied to determine sex. Collections from two of new localities found to incl. both males and females. *C. sowerbii* is reported for the first time from North Carolina.

- Grzenda, A. R.** (1960) F
Thesis, Michigan State Univ., 108 p. 8-01175
Primary production, energetics, and nutrient utilization in a warm-water stream

DA 22 (12) : 4145-6. Investigated in stream in south central portion of Lower Peninsula of Michigan. Gravimetric net production estimates made from periphyton harvested from plexiglass substrata which had been submerged in the stream. Colorimetric productivity measurements made by relating absorbancy of phytopigments extracted from the periphyton colony to the ash-free dry weight of the colony. Good agreement was noted between the two methods. Diurnal oxygen curves were found to be unsuitable for year-round productivity measurements. A model describing primary energetics was synthesized from observed data and literature values.

- Maffi, M.** (1962) F
Nature, Lond., 195 (4842) : 722 8-01176
Triops granarius (Lucas) (Crustacea) as a natural enemy of mosquito larvae

Predators of *Anopheles gambiae* in pools in central-north Somalia.

BENTHOS

- Fell, H. B.** (1962) M
Science, 136 (3516) : 633-6 8-01177
A surviving somasteroid from the eastern Pacific Ocean

Archaic asterozoan *Plastasterias* isolated by analysis of gradient fields in fossils and extinct groups.

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M

Rees, G. H. (1962)
Chesapeake Sci., 3 (1) : 29-34

8-01178

Effects of gamma radiation on two decapod crustaceans, *Palaemonetes pugio* and *Uca pugnax*

Subjected to graded doses of cobalt-60 gamma radiation. Dose required to kill 50% of the animals within 7 days, and 30 days was calculated. Prolongation of intermolt period was observed.

M

Pfitzenmeyer, H. T. (1962)
Chesapeake Sci., 3 (2) : 114-20

8-01179

Periods of spawning and setting of the soft-shelled clam, *Mya arenaria*, at Solomons, Maryland

Larvae and spat samples were taken weekly from the end of a pier in approximately 6 feet of water. Periods of abundance which were correlated with daily surface water temperatures and salinities, indicated two annual periods of spawning and setting. Examination of gonad revealed that two peaks of spawning are the result of two separate maturations and not a cessation in spawning due to the high summer temperatures.

M

Hopkins, S. H. (1962)
Chesapeake Sci., 3 (2) : 121-4

8-01180

Distribution of species of *Cliona* (boring sponge) on the eastern shore of Virginia in relation to salinity

4 spp. occur on both seaside and bayside of the eastern shore peninsula of Virginia.

M

Welch, A. M. (1962)
J. Bact., 83 : 97-9

8-01181

Preliminary survey of fungistatic properties of marine algae

CFA 15 (7) : 15-6. Algae collected at depths to 30 feet from coral reefs and mangrove islands from the coast of California. Total of 68 homogenized preparations representing 35 distinct spp. of algae were tested against six fungi. The test organisms were *Aspergillus niger*, *Penicillium* sp., *Mucor racemosus*, *Rhizopus oryzae*, *Candida albicans*, and *Cryptococcus neoformans*.

M

Yanagita, T. M. (1960)
Comp. Biochem. Physiol., 1 (2) : 123-39

8-01182

Physiological mechanism of nematocyst responses in sea-anemone—3. Excitation and anaesthetization of the nettling response system

Co 61-11104. Experiments with Japanese form *Diadumene*; comparison with *Anemonia*

- M
8-01183
- Yanagita, T. M.** (1960)
Comp. Biochem. Physiol., 1 (2) : 140-54
Physiological mechanism of nematocyst responses in sea-anemone—4.
Effects of surface-active agents on the cnidae *in situ* and in isolation
Co 8-01182.
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8-01184
- Manwell, C.** (1960)
Comp. Biochem. Physiol., 1 (4) : 277-85
Histological specificity of respiratory pigments—2. Oxygen transfer
systems involving hemerythrins in sipunculid worms of different ecologies
Co 62-04743, concerning *Dendrostomum* and *Siphonosoma*.
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8-01185
- Clarke, A. H.** (1961)*
Bull. Mus. comp. Zool. Harv., 125 (12) : 343-87
Abyssal mollusks from the South Atlantic Ocean
- M
8-01186
- Lignau, N.** (Slessers, M., Transl.) (1961)*
Washington, U.S. Hydrogr. Off. Trans.-8, 38 p.
The process of marine fouling
En 1923-26 Lignau, N.
- M
8-01187
- Gilbert, W. J.** (1961)
Phycologia, 1 (1) : 32-6
Pseudobryopsis oahuensis in Hawaii
- M
8-01188
- Neiman, A. A.** (1961)*
Okeanologia, 1 (2) : 294-304
(Certain mechanisms in the quantitative distribution of benthos in the
Bering Sea). Ru
- M
8-01189
- Neiman, A. A.** (Anon., Transl.) (1962)*
28 p.
Certain mechanisms in the quantitative distribution of benthos in the
Bering Sea
En 8-01188. Available from the Office of Technical Services, Washington,
D.C.
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8-01190
- Domantay, J. S.** (1961)
Philipp. J. Sci., 90 (3) : 333-46
New forms of Holothurioidea from the vicinity of southern California
and Mexico in the collection of the Allan Hancock Foundation, University
of Southern California in Los Angeles, California

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- Quayle, D. B.** (1962) M
8-01191
Progr. Rep. Pacif. Cst. Sta., (114) : 9-12
 Abalones in British Columbia
- Sandison, E. E.** (1962) M
8-01192
Proc. zool. Soc. Lond., 138 (4) : 517-42
 The populations of *Balanus amphitrite* var. *stutsburi* on the Guinea coast
- Buchanan, J. B.** (1962) M
8-01193
Proc. zool. Soc. Lond., 138 (4) : 645-50
 A re-examination of the glandular elements in the tube feet of some common British ophiuroids
- Joyner, A.** (1962) M
8-01194
Proc. zool. Soc. Lond., 138 (4) : 655-66
 Reproduction and larval life of *Nerine cirratulus* (Delle Chiaje) family Spionidae
- Ling, S. W. & A. B. O. Merican** (1962) M
8-01195
Proc. Indo-Pacif. Fish. Coun., 9 (2) : 55-61
 Notes on the life and habits of the adults and larval stages of *Macrobrachium rosenbergi* (De Man)
 Do 60-002me.
- Bersamin, S. V. et al.** (1962) M
8-01196
Proc. Indo-Pacif. Fish. Coun., 9 (2) : 115-9
 Some seaweeds consumed fresh in the Philippines
 Do 60-002me.
- Boschung, H. V. & G. Gunter** (1962) M
8-01197
Tulane Stud. Zool., 9 (5) : 245-57
 Distribution and variation of *Branchiostoma caribaeum* in Mississippi Sound
 Literature indicates its abundance on parts of western Florida coast, but not recorded in abundance along the northern Gulf coast. Quantitative collections by modified Petersen grab showed sp. present in numbers up to 73 per square meter in Mississippi Sound and a little way outside the barrier islands from Mobile Bay to Louisiana, an area of about 350 square miles.
- Rees, D. A. & E. Conway** (1962) M
8-01198
Nature, Lond., 195 (4839) : 398-9
 Water-soluble polysaccharides of *Porphyra* species: a note on the classification of *P. nariadum*

Stewart, W. D. P. (1962)

M
8-01199

Nature, Lond., 195 (4839) : 402-3

Occurrence of *Cystoseira tamariscifolia* (Huds.) Papenf. on the west coast of Scotland

Horridge, G. A. (1962)

M
8-01200

Nature, Lond., 195 (4839) : 403

An annelid proprioceptor

Structure of *Harmothoe* is in most respects typical of errant polychaetes, but on dorsal side are scales which most polychaetes do not have. Methylene blue preparations reveal types of sense organs.

Powell, A. W. B. (1961)

M
8-01201

Proc. Pacif. Sci. Congr., 9 (10) : 8

Mollusca from the Kermadec Islands, a marginal Indo-Pacific area

Abstr. only. Symposium on biology of aquatic animal life in the tropics with special reference to the Indo-Pacific area.

Serene, R. (1961)

M
8-01202

Proc. Pacif. Sci. Congr., 9 (10) : 32-4

A note on the systematics of the Brachyura and the morphology of commensal species

Symposium on biology of aquatic animal life in the tropics with special reference to the Indo-Pacific area.

Ranson, G. & R. Serene (1961)

M
8-01203

Proc. Pacif. Sci. Congr., 9 (10) : 40-2

New knowledge of the marine invertebrate fauna of Viet-Nam

Symposium on biology of aquatic animal life in the tropics with special reference to the Indo-Pacific area.

Schmid, O. J. (1962)

M
8-01204

Bot. mar., 3 (Suppl.) : 67-74

Die Inhaltsstoffe der Meeresalgen (The constituent substances of marine algae). En Fr

Describes basic constituent substances of brown algae, namely alginic acid and its compounds, laminaran, fucoidan, mannitol, and the red algae products: agar, carrageenan, eucheuman, funoran, furcellaran, hypnean, iridophycan and phyllophoran.

Schulzen, H. (1962)M
8-01205*Bot. mar.*, 3 (Suppl.) : 75-85Die chemisch-physikalischen Eigenschaften der Alginat und Carrageenat
(The chemical physical properties of alginates and carrageenates). En Fr

Defines the characteristic differences between alginates and carrageenates, with special emphasis on the techniques of their application.

Maass, H. (1962)M
8-01206*Bot. mar.*, 3 (Suppl.) : 86-100

Über die Verwendungsmöglichkeiten von Alginaten (On the application of alginates). En Fr

Discusses important industrial fields of application of alginates.

Schmid, O. J. & H. A. Hoppe (1962)M
8-01207*Bot. mar.*, 3 (Suppl.) 101-19

Meeresalgen als Dünge-, Futter- und Nahrungsmittel (Marine algae used as fertilizers, feeding and food material). En Fr

In 3 chapters: Marine algae as fertilizer; Fodder; Food. Reviews the production and consumption of these products in different countries.

Hoppe, H. A. & O. J. Schmid (1962)M
8-01208*Bot. mar.*, 3 (Suppl.) : 16-66

Meeresalgen als moderne Industrieprodukte (Marine algae as modern industrial products). En Fr

Discusses terms and definitions of certain groups of marine algae as raw materials, collective nouns and designations for products made of brown and red algae, with notes on the distribution of the spp. and methods used in the collection and production. Incl. bibliographic list.

van Baalen, C. (1962)M
8-01209*Bot. mar.*, 4 (1-2) : 129-39

Studies on marine blue-green algae. Fr Es De

Blue-green algae have been isolated from inshore marine environments using the test tube culture method developed by Myers and the ASP₂ medium suggested by Provasoli *et al.* Some aspects of the physiology and nutrition of the cultures have been examined. No marked heterotrophic ability was found with any of the cultures, using as substrates glucose, acetate, lactate, casamino acids, and complex organic materials.

- Müller, D.** (1962) M
8-01210
Bot. mar., 4 (1-2) : 140-55

Über jahres- und lunarperiodische Erscheinungen bei einigen Braunalgen (On the year and lunar periodicity phenomena in some brown algae). En Fr Es

Reports results on the development of sporangia of *Ectocarpus siliculosus* under different culture conditions—temperature and light. On *Dictyota*, the lunar periodicity in releasing the sexual cells can be repeated under controlled experimental conditions.

- Fetzmann, E. & H. Kusel** (1962) M
8-01211
Bot. mar., 4 (1-2) : 175-83

Über Bau und Wachstum der Zellwände einiger Ceramiales (On the construction and growth of cellwalls in some Ceramiales). En

The cellwalls of *Bornetia secundiflora*, *Griffithsia opuntioides*, *G. schousboei* and *Neomonospora furcellata* were studied. in HCl, in NaOH or chlor-zinc-iodine cause a heavy swelling of the whole wall. In this way a clear lamellate structure becomes visible.

- Ono, Y.** (1960) M
8-01212
Jap. J. Ecol., 10 (4) : 161-8

(Interrelation among individuals of a fiddler crab, *Ilyoplax pusillus* De Haan—2. The regulatory mechanism at high population density). Ni En

Effects of high population density on behaviour, distribution of nests and dispersal studied by using experimental cages set on natural habitat of crab.

- Bernard, F. J. & C. E. Lane** (1962) M
8-01213
J. Morph., 110 (1) : 19-39

Early settlement and metamorphosis of the barnacle *Balanus amphitrite niveus*

Preliminary to comprehensive investigation of mode of action of anti-fouling shipbottom paints, study of settling and attachment was initiated. Living animals were observed directly and critical stages were fixed for histological and histochemical study. A transitional stage which has been neglected by previous workers was intensively studied. Identification of 5 distinct stages in metamorphosis of *B. amphitrite niveus*, morphology of larvae and sequence of changes incident to attachment described.

- Baker, H. B.** (1962)* M
8-01214
Nautilus, 75 : 142-5

Puerto Rican oleacinoids

- Coomans, H. E.** (1961)* M
8-01215
Rep. Amer. malac. Un., 1960 : 21-2

Shell collecting in the Netherlands Antilles

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- Coomans, H. E.** (1962) M
8-01216
Rep. Amer. malac. Un., 1961 : 6-7
 Experiments on the velocity of marine gastropods
- Moore, D. R.** (1962)* M
8-01217
Rep. Amer. malac. Un., 1961 : 20
 The molluscan sea grass communities in Biscayne Bay
- Olsson, A. A. & D. R. Moore** (1962) M
8-01218
Nautilus, 75 : 127-8
 A neglected west Atlantic stromb
- Robertson, R.** (1962)* M
8-01219
Rep. Amer. malac. Un., 1961 : 7-8
 Wentletraps (Epitoniidae) feeding on coelenterates
- Robertson, R.** (1962)* M
8-01220
Nautilus, 75 : 128-30
 The status of *Strombus canaliculatus*
- Lloyd, P. H., K. O. Lloyd & O. Owen** (1962) M
8-01221
Biochem. J., 85 (1) : 193-8
 Carbohydrate sulphatases of marine molluscs
- Method for determining small amounts of L-fucose liberated from sodium L-fucose monosulphates by enzyme preparations from *Patella vulgata* is described.
- Segal, E.** (1962) M
8-01222
Nature, Lond., 195 (4842) : 674-5
 Initial response of the heart-rate of a gastropod, *Acmaea limatula*, to abrupt changes in temperature
- Experiments were carried out on populations of limpets from different habitats—Los Angeles and San Diego, California, and Punta Banda, Baja California—and at different times of the year.
- MacKenzie, C. L., Jr.** (1962) M
8-01223
Science, 137 (3523) : 36-7
 Transportation of oyster drills by horseshoe "crabs"
- Limulus polyphemus* collected in New Haven Harbor, Long Island Sound, had large numbers of *Eupleura caudata* and *Urosalpinx cinerea*.
- Kachroo, P.** (1960)* M
8-01224
 New Delhi, Indian Council of Agricultural Research, 406 p.
 Proceedings of the symposium on algology. 1959

- Silva, P. C.** (1962) MF
8-01225
Science, 136 (3524) : 122
 Phycology in India

Re 8-0122.

- Mansueti, R. J.** (1962) MF
8-01226
Chesapeake Sci., 3 (2) : 129-30
 Callico crab, *Ovalipes o. ocellatus* in mid-Chesapeake Bay, Maryland

Medium-sized female dredged from an oyster bar at a depth of 30 feet off Cove Point, Calvert County, on 30 Mar. 1962. Upstream occurrence seems related to the unusual hydrographic and stormy conditions of the second week of March.

- Papenfuss, G. F.** (1961) MF
8-01227
Phycologia, 1 (1) : 8-31
 The structure and reproduction of *Caloglossa leprieurii*

Present study supports placement of *Caloglossa* in a separate group within the Delesseriaceae. *Taenioma* is here removed from the *Sarcomenia* to the *Caloglossa* group. The question of the systematic position of the *Sarcomenia* group is discussed.

- Proctor, V. W.** (1961) MF
8-01228
Phycologia, 1 (4) : 160-3
Batophora from central New Mexico

Contains information on the regional distribution and ecology of this tropical marine and brackish-water green algae.

- Fott, B.** (1961) MF
8-01229
Phycologia, 1 (4) : 183-6
 Phycological activity in Czechoslovakia

Reviews scientific activities in this field and future lines of development; incl. references to work in connection with fisheries and industrial use of algae.

- Clark, R. B.** (1962) MF
8-01230
Proc. zool. Soc. Lond., 138 (4) : 543-78
 On the structure and functions of polychaete septa

- Squires, D. F.** (1962) MF
8-01231
Nature Lond., 195 (4839) : 361-2
 Corals at the mouth of the Rewa River, Viti Levu, Fiji

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MF
8-01232

Edmunds, M. (1962)
Nature, Lond., 195 (4839) : 402
Bivalved gastropod from Jamaica

Berthelinia Crosse (= *Tamanovalva* Kawaguti & Baba) has been reported from Japan, Australia and California. A second genus, *Midorigai* Burn, has been described from Australia. This communication records *Berthelinia* from Jamaica. First specimen found on *Caulerpa verticillata* Agardh growing on rocks in an open part of a mangrove channel near Port Royal on 8 Jan., 1962. Small quantities of algae collected on 11 and 16 Jan. yielded 50 more specimens.

MF
8-01233

Levring, T. (1962)
Bot. mar., 3 (Suppl.) : 9-11
The vegetation in the sea

A brief review of general systematic classification of algae with special reference to economically important genera.

M
8-01234

Hoppe, H. A. (1962)
Bot. mar., 3 (Suppl.) : 12-5
Geschichtliche Entwicklung der Auswertung von Meeresalgen (Historical development of the evaluation of marine algae). En Fr

Brief historical review of economical use of algae and products extracted from marine spp.

MF
8-01235

Desikachary, T. V. (1961?)
Proc. Summer Sch. Bot. Darjeeling, 1960 : 77-87
Electron microscope studies on algae

BSEA 8 (7) 4130.

MF
8-01236

Föyn, B. (1962)
Bot. mar., 4 (1-2) : 156-62
Two linked autosomal genes in *Ulva mutabilis*. Fr Es De

Two recessive autosomal mutants, "branched" (*br*) and "precocious" (*pre*), are described which arose spontaneously in cultures of *U. mutabilis*.

F
8-01237

Brown, H. P. & M. M. Jenkins (1962)
Science, 136 (3517) : 710
A protozoan (*Dileptus*: Ciliata) predatory upon Metazoa

Common holotrich, may function as a predator upon a variety of metazoan animals representing phyla Cnidaria, Platyhelminthes, Aschelminthes, Annelida and Mollusca. Very young animals and wounded animals are especially vulnerable.

- F
8-01238
- Brinkhurst, R. O. (1960)***
Proc. R. ent. Soc. Lond., 35A : 91-2
 The British distribution of the water-bug *Velia saulii* Tamanini with some notes on alary polymorphism
- F
8-01239
- Oundle School Natural History Society (1960)**
 41 p.
 Report 1959
 Faunistic notes on Cladocera, leeches and Platyhelminthes. Study of a population of *Chlorohydra viridissima* in a local pond.
- F
8-01240
- Hart, C. W. (1961)***
Not. nat. Acad. Philad., (342) : 3 p.
JONGA, a new genus of freshwater atyid shrimps (Decapoda, Atyidae)
- F
8-01241
- Kessler, E. & C. J. Soeder (1962)**
Nature, Lond., 194 (4833) : 196-7
 Biochemical contributions to the taxonomy of the genus *Chlorella*
 States that the taxonomy of the critical section *Euchlorella* of the genus *Chlorella* can be based on some physiological and biochemical characteristics which can easily be determined.
- F
8-01242
- Manton, I. & G. F. Leedale (1961)**
Phycologia, 1 (1) : 37-57
 Observations on the fine structure of *Paraphysomonas vestita*, with special reference to the Golgi apparatus and the origin of scales
- F
8-01243
- Sachs, T. & A. M. Mayer (1961)**
Phycologia, 1 (4) : 149-59
 Studies on the relation between metabolism and phototaxis of *Chlamydomonas snowiae*
 Studies the effect of various factors; constant shaking, use of young cultures, previous treatment with darkness, substances accumulating in growth medium, metabolic inhibitors.
- F
8-01244
- Moore, W. G. & L. H. Ogren (1962)**
Tulane Stud. Zool., 9 (5) : 315-8
 Notes on the breeding behavior of *Eubbranchipus holmani* (Ryder)
 Activities are described and environmental factors, especially water temperature, known to be associated with such activity, are reviewed. Various aspects of breeding behavior, incl. preliminary positioning, clasping attempts, and successful and unsuccessful copulation are described and compared with published accounts of other spp. of Anostraca.

Wise, C. D. (1962)F
8-01245

Thesis, The Univ. of New Mexico, 347 p.

Taxonomy and ecology of fresh-water ostracods of south-central Texas

DA 22 (12) : 4165. 407 collections from 53 counties studied. Collections made during seasons from Apr. 1958, through Apr. 1960. Effect of environmental factors on distribution of ostracods; nature of bottom calcium concentration, conductance, current; permanency of waters, nature of vegetation, and animal relationships are noted in detail. Methods of collecting and preparing ostracods for study are discussed. Spp. found during study are described and figured. 25 new spp. and one new genus are described and 2 previously described genera are reported from North America for the first time. Key is incl.

Henderson, A. E. (1961)F
8-01246

Thesis, Univ. of Glasgow, U.K.

Studies on the respiratory and hydrostatic functions of the mantle cavity in two freshwater pulmonate snails

Volume changes in gas contained in mantle cavity of *Lymnaea stagnalis* and *Planorbarius corneus* are studied, under laboratory conditions, by an underwater weighing technique using a torsion balance.

Venkataraman, G. S. (1962)F
8-01247*Proc. nat. Inst. Sci. India*, 28B (1) : 77-88Mineral nutrition of *Anacystis montana* (Lightf.) Dr. and Daily

Minimum concentrations of various major elements to produce a maximum growth of this blue-green alga under the present experimental conditions found.

Gillham, N. W. & R. P. Levine (1962)F
8-01248*Nature, Lond.*, 194 (4834) : 1165-6Pure mutant clones induced by ultra-violet light in the green algae, *Chlamydomonas reinhardtii***Strietelmeier, D. & R. B. Koch** (1962)F
8-01249*Nature, Lond.*, 195 (4840) : 474-6

Modifications of green algae to be used as food

One phase in attempt to develop a high protein product for use as a food extender from a strain of *Chlorella* (Sorokin) with a high-temperature optimum for growth. It was postulated that an extraction procedure could be developed which would modify the colour and remove the bitter principle of *Chlorella*.

FG

8-01250

Singh, R. N. (1961)

New Delhi, Indian Council of Agricultural Research, 175 p.

Role of blue-green algae in nitrogen economy of Indian agriculture

Monograph dealing with the biology of Myxophyceae in relation to nitrogen economy of the Indian soils and waters. Contains chapters on: General characteristics of the blue-green algae, the terrestrial and other blue-green algae, methods of investigation of soil algae and their nitrogen-fixing capacity, nitrogen fixation, nitrogen fixation in rice fields, reclamation of 'usar' lands, conservation of other soils, biological productivity of inland waters with special reference to water-blooms, the role of blue-green algae in natural economy, references.

FG

8-01251

Cohen, P., J. J. Powers & D. E. Pratt (1962)*Bot. mar.*, 4 (1-2) : 163-74

Industrial food wastes as substrates for the growth of algae. Fr Es De

Both *Chlorella vulgaris* var. *viridis* and Sorokin's *Chlorella*, a thermophilic alga, exhibited the most notable overall effects when grown on an okra-basal medium. Gibberellic acid and potassium gibberellate both produced slight acceleration during the initial growth stages of the algae and larger cells as compared microscopically with cells grown in the basal control. *Basamibact* produced algae with a high nitrogen content. Essential amino acid values obtained in this study compare favorably with results by other investigators.

G

8-01252

Grimm, H. (1961)*Biom.-Prax.* 2 (1) : 1-18

(Some problems in bacterial counting). Fr

STA 3 (3) 3/333. Following points are discussed: 1. type of distribution of particles will be recognized by plotting on Poisson cumulative probability paper. The various curves—Poisson, binomial, negative binomial, Neyman, log-series—become evident from this diagram, and their parameters may be estimated by means of transparent stencils. Some empirical distributions are discussed; 2. in counting particles, time may be saved when a modified counting method is employed. The mean and standard error are estimated from the censored Poisson. A little loss in precision is compensated by an essential saving in time; 3. Evidence is given of the difficulties involved in photoelectric counting.

G

8-01253

Hollis, J. H. & A. C. Chester (1961).*Psychol. Rep.*, 8 : 148

An invertebrate stimulator

PA 36 (1) : 58. Apparatus for holding and stimulating small invertebrates is described. Behavioral investigations such as habituation and conditioning are made possible and a variety of stimuli may be presented.

FISHING

Bellini, L. (1962)M
8-01254*Corr. d. Pesca*, 18 (15) : 1

La pesca nel Perú (Fisheries in Peru)

Note on UNSF FAO project and the anchoveta fishery

Tiews, K. (1962)M
8-01255*Veröff. Inst. Küsten-u. Binnenfisch.*, (25) : 53 p.

Experimental trawl fishing in the Gulf of Thailand and its results regarding the possibilities of trawl fisheries development in Thailand.

Results of pelagic and demersal trawling experiments in 1961 under bilateral agreement, German technical aid program. Review of existing fisheries and background, and recommendation for further development; charts, designs of gears, estimates of resources.

de Menezes, R. S. (1960)*M
8-01256

Bahia, Brazil, 20 p.

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Outboards at work

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SFA 7 (2) 4854. Fishes of nominal genera, *Serranus*, *Serranellus*, *Paracentropristes*, *Mentiperca* and *Prionodes* reviewed. Treatment comprehensive western North Atlantic spp., two of which are described as new, only type spp. of various genera are considered from other regions. Discussion of habits, habitat and other features. Synonymies for western Atlantic spp. and photographs, and key. Monotypic genus *Schultzea* and new Atlantic sp. of *Plectranthias* discussed.

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Glucose transport by the intestinal mucosa of the dogfish

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HA 31 (2) 1363. *Heteromicrocotyla vaginispina* n.sp. from the gills of *Carangoides malabaricus* differs from *H. carangis*. *H. polyorchis* n. sp. from gills of *C. malabaricus*. *Dicotyle vellavoli* n. sp. from the gills of *Chondroplites chinensis* differs from *D. stromatea*, a gill monogenean of *Stromateus cinereus*. *HETERAPTA heterapta* n.g., n. sp., from gills of *Chorinemus sanctipetri* is provisionally placed in the Heteromicrocotylinae. Some Monogenea from a "ribbon fish" caught off Suva Island are briefly described as *M. microcotyla* n. comb.

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Huizinga, H. W. & J. Haley (1962)
Chesapeake Sci., 3 (1) : 35-42

Occurrence of the acanthocephalan parasite *Telosentis tenuicornis*, in the spot, *Leiostomus xanthurus*, in Chesapeake Bay

Host-parasite relationship studied during summers of 1959 and 1960.

MF
8-01443

Grant, G. C. (1962)
Chesapeake Sci., 3 (1) : 45-7

Predation of bluefish on young Atlantic menhaden in Indian River, Delaware

Stomach contents of 262 *Pomatomus saltatrix* examined to determine whether sp. is predatory on *Brevoortia tyrannus*.

MF
8-01444

Mansueti, R. J. (1962)
Chesapeake Sci., 3 (2) : 137-9

Distribution of small, newly metamorphosed sea lampreys, *Petromyzon marinus*, and their parasitism on menhaden, *Brevoortia tyrannus*, in mid-Chesapeake Bay during winter months

Several examples observed from the channel at a depth of about 70 feet in Chesapeake Bay, Maryland. Snagged incidentally for gillnetting operations for striped bass.

MF
8-01445

Mansueti, R. (1962)
Chesapeake Sci., 3 (1) : 56-8

Experimental ecology of the feeding of fishes

Re 61-10823.

Mansueti, R. (1962)

MF

8-01446

Chesapeake Sci., 3 (1) : 56-8

Rate of metabolism and food requirements of fishes

Re 61-06950.

Meyers, C. D. & R. J. Muncy (1962)

MF

8-01447

Chesapeake Sci., 3 (2) : 125-8Summer food and growth of chain pickerel, *Esox niger*, in brackish waters of the Severn River, Maryland

Food habits and time of feeding determined for 220 collected from a tributary of Chesapeake Bay in five 24-hour sampling periods during June, July and August, 1958. Differences in stomach contents were noted between fish less than 80 mm standard length and fish greater than this length.

Mansueti, R. J. (1962)

MF

8-01448

Chesapeake Sci., 3 (2) : 135-7A 20-inch striped mullet, *Mugil cephalus*, with two anal spines taken in winter from Chesapeake Bay, Maryland

Unusually large but slender female taken from a depth of 80 feet in a drift gillnet in the main estuarine channel off Calvert County, in December, 1961.

Nigrelli, R. F. (1962)

MF

8-01449

Deep-Sea Res., 9 : 80

Parasitology of fishes

Re 61-08374.

Kerkut, G. A. & S. Krishnaswamy (1960)

MF

8-01450

Comp. Biochem. Physiol., 1 (4) : 293-301

Electrical potentials in the Isopoda (Crustacea)

Series of large regular potentials that sound as a loud "crump" over the loud-speaker found in all the isopods so far studied: *Porcellio*, *Armadillidium*, *Oniscus*, *Ligia*, *Naesa* and *Idotea*.

Barber, A. A. & P. Sheeler (1961)

MF

8-01451

Comp. Biochem. Physiol., 2 (4) : 233-40

Iron binding by vertebrate blood sera

Specific iron-binding components were demonstrated in rat, and fish sera by using starch gel electrophoresis and radioactive iron. Experiments with *Seriola*.

AQUATIC STOCKS

Macey, P. T. (Comp.) (1961) MF
 Unpag., 24 p. 8-01452
 Pacific salmon literature: a preliminary list of English translations

Available translations are listed of papers, mainly Russian and Japanese, written between 1916 and 1960, alphabetical by author. Cataloging incl. title of paper in English, title (transliterated if necessary), descriptive notes, date of translation, translation note—name of journal in which article originally appeared, or other information telling what was translated—and order information. List of translations in process is also incl.

Dawes, B. (1962) MF
Nature, Lond., 194 (4823) : 55-6 8-01453
 The monogenetic trematodes: a Russian view
 Re 62-04446.

Crisp, D. J. (1962) MF
Nature, Lond., 194 (4833) : 1028-9 8-01454
 Grazing in terrestrial, freshwater and marine environments

No 61-324me. Contains informations on the principal contributions presented.

Janzen, D. H. (1961) MF
In 8-01557 : 61-8 8-01455
 Problems with fish and pesticides in the United States
 Do 60-145me. A review of situation.

Jones, J. W. & H. Evans (1962) MF
Proc. zool. Soc. Lond., 138 (4) : 499-515 8-01456
 Salmon rearing in mountain tarns—A preliminary report.

Yang, W. T. & U. B. Kim (1962) MF
Proc. Indo-Pacif. Fish. Coun., 9 (2) : 62-70 8-01457
 A preliminary report on the artificial culture of gray mullet in Korea
 Do 60-002me.

Gunning, G. E. & C. R. Shoop (1962) MF
Tulane Stud. Zool., 9 (5) : 265-72 8-01458
 Restricted movements of the American eel, *Anguilla rostrata* (LeSueur), in freshwater streams, with comments on growth rate

Movement studied in two headwater streams in Louisiana. Eels were marked using metal tags or by fin-clipping. Short-term experiments in Talisheek Creek yielded home range estimates. Long-term observations limited. Growth data based on observation of marked eels showed that growth is quite irregular, a fact well-established for the European eel.

Tinkle, D. W. (1962)MF
8-01459*Tulane Stud. Zool.*, 9 (5) : 331-49

Variation in shell morphology of North American turtles.—1. The carapacial seam arrangements

Position of contacts between the interlateral seams and the marginal laminae were examined in approximately 4000 specimens of 33 spp. in an attempt to determine the degree of variability and to discover if this character could be used as a taxonomic character at several levels. Geographic variation demonstrated in several of contacts, but mostly non-clinal. Data are presented on ontogenetic variation and on population comparative variation for spp. for which large samples were available.

Bao-Khua, U. (1961)MF
8-01460*Vestn. leningr. Univ. (biol.)*, 16 (21) : 62-72(Change in the parasite fauna of fish in the Neva inlet during the last twenty-five years). *Ru En*

HA 31 (2) 1013. Parasite fauna of 206 fishes belonging to 12 spp. studied during 1958 and 1959; the locality was the same as that studied by Dogel & Petrushevski during 1930 and 1933. Considerable decrease in incidence of *Diphyllobothrium latum* plerocercoids attributed to improved sanitary conditions of populated areas near coast.

Ginetsinskaya, T. A. & G. A. Shtein (1961)MF
8-01461*Vestn. leningr. Univ. (biol.)*, 16 (15) : 60-72(Characteristics of the parasitic fauna of invertebrates and the application of basic rules of ecological parasitology to these infections). *Ru*

HA 31 (2) 1331. Authors have shown, restricting themselves to aquatic invertebrates, that the basic rules of ecological parasitology—as worked out by Dogel in 1947 for vertebrates—are also applicable to the parasite fauna of invertebrates.

Krotas, R. A. (1959)MF
8-01462*Trud. Akad. Nauk litovsk. SSR*, (18) : 173-6(Cucullanus dogieli n.sp., a parasite of cyprinid fish). *Ru Li*

HA 31 (2) 1445. Described and figured; found in *Rutilus rutilus*, *Leuciscus leuciscus*, *L. cephalus*, *L. idus*, *Barbus barbus*, *Alburnus alburnus*, *Alburnoides bipunctatus*, *Blicca bjoerkna* and *Vimba vimba* from the Zapadnaya Dvina, Neman, Dniester, Danube and Don. Differentiated from *C. cyprini*, only other sp. of this genus parasitic in cyprinids. New sp. is also differentiated from *C. cirratus*, *C. heterochrous* and *C. incertus* from marine life.

Shcherbina, A. K. (1960)MF
8-01463

Kiev, 334 p.

(Diseases of fish and their control). *Ru*

HA 31 (2) 1490.

AQUATIC STOCKS

- Clements-Merlini, M.** (1962) MF
8-01464
Gen. comp. Endocr., 2 (4) : 354-68
Altered metabolism of I_{131} by the endostyle and notochord of ammocoetes larvae.—1. Effects of treatment with thyrotropic stimulating hormone

Experiments with larvae of *Petromyzon marinus*.

- Clements-Merlini, M.** (1962) MF
8-01465
Gen. comp. Endocr., 2 (4) : 361-8
Altered metabolism of I_{131} by the endostyle and notochord of ammocoetes larvae.—2. Effects of treatment with thiourea or potassium thiocyanate

Co 8-01464. Experiments with larvae of *Petromyzon marinus*.

- Anon.** (1962) MF
8-01466
Fish. Yearb. Direct., 1962 : 110-4
Dictionary of fish names

- Horner, J. L., N. Longo & M. E. Bitterman** (1961) MF
8-01467
Amer. J. Psychol., 74 : 114-20
A shuttle box for fish and a control circuit of general applicability

PA 36 (1) : 58.

- Lindsey, C. C.** (1961) MF
8-01468
Proc. Pacif. Sci. Congr., 9 (10) : 54-8
The bearing of experimental meristic studies on racial analyses of fish populations

Symposium on new or little explored aspects of fishery research.

- Neave, F.** (1961) MF
8-01469
Proc. Pacif. Sci. Congr., 9 (10) : 59-62
Pacific salmon: ocean stocks and fishery developments

Symposium on new or little explored aspects of fishery research.

- Villadolid, D. V.** (1961) MF
8-01470
Proc. Pacif. Sci. Congr., 9 (10) : 88
Possible improvement of Philippine commercial fish ponds as indicated by the food habits of fry and fingerlings of the milkfish, *Chanos chanos* Forskal

Abstr. only. Symposium on the improvement and management of natural inland waters and impounds waters.

MF
8-01471**Moss, M. L.** (1961)*Acta anat.*, 46 (4) : 343-62

Studies of the acellular bone of teleost fish. 1. Morphological and systematic variations.

136 spp. of 71 families of teleosts studied—mainly from the Lerner Marine Laboratory at Bimini, Bahamas—generally the lower orders have cellular type of bone whereas the higher orders have developed an acellular type—usually uniform throughout the skeleton.

MF
8-01472**Key, D.** (1962)*Nature, Lond.*, 195 (4841) : 620

Abnormal breeding behaviour in the oyster

Observations of *Ostrea edulis* in River Crouch, Essex, UK, 27 Nov.—2 Dec. 1961, in "black sick" condition.

MF
8-01473**Sokolov, W.** (1962)*Nature, Lond.*, 195 (4840) : 464-6

Adaptations of the mammalian skin to the aquatic mode of life

General review of subject with reference to spp. of cetaceans, pinnipeds, otters, beavers. Deals comparatively with structural and chemical factors.

F
8-01474**Woolcott, W. S.** (1962)*Chesapeake Sci.*, 3 (2) : 94-113Intraspecific variation in the white perch, *Roccus americanus* (Gmelin)

Results compared with that of the striped bass, *R. saxatilis*, which occurs sympatrically over a part of the range. Counts of fin rays and scales and measurements of various body parts were made on over 1,400 specimens. The data are presented as frequency distributions. There appear to be two primary gene pools located north and south of the Delaware River.

F
8-01475**Mackereth, J. C.** (1960)*Proc. R. ent. Soc. Lond.*, 35A : 17-23

Notes on the Trichoptera of a stony stream

Details of collection of fifteen spp., excluding the limnophilids, obtained from a moorland stream near Windermere. Incl. discussion of their life-histories and distribution of larvae.

F
8-01476**Crisp, D. T.** (1959)*Irish Nat. J.*, 13 : 88-92

Hydracarinae and nematodes parasitizing *Corixa scotti* (D. & S.) (Hemiptera) in western Ireland

Both parasites may affect the fecundity of *C. scotti* in some water bodies.

AQUATIC STOCKS

- Burton, J. F.** (1960) F
8-01477
Lond. Nat., 39 (1959) : 17-8
 Records of fishes from the N.W. Kent marshes
 Notes on habitats and abundance for 10 spp.
- McWhinnie, M. A. & P. N. Saller** (1960) F
8-01478
Comp. Biochem. Physiol., 1 (2) : 110-22
 Analysis of blood sugars in the crayfish, *Orconectes virilis*
 Effects of deprivation of eyestalks, and seasonal changes and relation to moult cycle in specimens from Wisconsin kept in aquaria.
- Wilber, C. G.** (1960) F
8-01479
Comp. Biochem. Physiol., 1 (2) : 164-6
 Cardiac responses of *Alligator mississippiensis* to diving
 Alligators subjected to a simulated dive show a profound bradycardia. Thus respond in same way as do the seal, duck and certain snakes and lizards.
- Edgren, R. A.** (1960) F
8-01480
Comp. Biochem. Physiol., 1 (3) : 213-7
 A seasonal change in bone density in female musk turtles, *Sternotherus odoratus* (Latreille)
 Sex differences and relation to breeding cycle in the NE American Kinosternidae.
- Wagner, J. A.** (1962) F
8-01481
 Thesis, Michigan State University, 210 p.
 Gross and microscopic anatomy of the digestive and urinary systems and histology of the reproductive system of the nutria, *Myocastor coypus bonariensis* (Geoffroy)
- Jackson, P. B. N.** (1961)* F
8-01482
 Lusaka, Govt Print., 140 p.
 The fishes of Northern Rhodesia; a check list of indigenous species
- Chamberland, E.** (1961)* F
8-01483
 La Pocatière, France, 13 p.
 L'efficacité de la production de la truite on pisciculture (The efficiency of production in trout culture)

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Bailey, R. M. & M. O. Allum (1962)*

F
8-01484

Misc. Publ. Mus. Zool. Univ. Mich., (119) : 131 p.

Fishes of South Dakota

Identifies published records, presents keys for identification. Records original distributional data based on 137 collections throughout State. Solves some problems involving systematic status of certain species. Clarifies or extends information on distribution of several spp. in adjoining Plains area. Determines geographic sources of origin of South Dakota fishes and interprets routes of postglacial dispersal.

Gordon, I. (1962)

F
8-01485

Nature, Lond., 194 (4823) : 50-1

A classification of living animals

Re 62-00968.

Alabaster, J. S. & R. L. Welcomme (1962)

F
8-01486

Nature, Lond., 194 (4823) : 107

Effect of concentration of dissolved oxygen on survival of trout and roach in lethal temperatures

Aquarium experiments with *Salmo gairdnerii* and *Rutilus rutilus*.

Wickler, W. (1962)

F
8-01487

Nature, Lond., 194 (4833) : 1092-3

"Egg-dummies" as natural releasers in mouth-breeding cichlids

Reports observations on the fertilization of eggs in African *Haplochromis wingatii*, with interpretation of similar cases in certain spp. of *Tilapia*.

Larsen, L. O. (1962)

F
8-01488

Nature, Lond., 194 (4833) : 193

Weight and length in the river lamprey

Reports laboratory observations on *Lampetra fluviatilis* (L.) Gray shortening during fasting. Compares results of observations made in Sweden, Denmark and Netherlands.

Nishkov, M. & S. Nikolov (1960)*

F
8-01489

Khidr. i Met., 5 (2) : 56-9

(Problems of pisciculture in connection with the development of hydro-technical construction in Bulgaria). *Bu*

Szabo, Th. (1962)

F
8-01490

Life Sci., (7) : 285-6

The activity of cutaneous sensory organs in *Gymnarchus niloticus*

Electrical activity recorded by placing silver/silver chloride electrodes on surface of skin of unanaesthetized fish partly raised from water.

AQUATIC STOCKS

F
8-01491

Whitehead, P. J. P. (1962)
Proc. zool. Soc. Lond., 138 (4) : 605-37
 The relationship between *Tilapia nigra* (Günther) and *T. mossambica* Peters in the eastern rivers of Kenya

F
8-01492

Ahmad, N. (1962)
Proc. Indo-Pacif. Fish. Coun., 9 (2) : 71-2
 Recent advances in piscicultural practices in Pakistan
 Do 60-002me.

F
8-01493

Prowse, G. A. (1962)
Proc. Indo-Pacif. Fish. Coun., 9 (2) : 73-5
 The use of fertilizers in fish culture
 Do 60-002me.

F
8-01494

Anon. (1961)
Bull. Chamb. Agric. Cameroun, 40 : 46-9
 Politique piscicole pour les eaux continentales de l'ouest africain
 (Piscicultural policy for the continental waters of West Africa)

TA 17 (8) j2162. Discussion of the importance of inland fisheries and fish culture for West Africa. It is stated that the introduction of *Tilapia* has greatly stimulated interest in fish culture. More attention should be paid to the possibility of using *Heterotis niloticus* in fish culture.

F
8-01495

Anon. (1962)
 News from Hsinhua News Agency, China, 1601, p. 12
 African fish thrives in Yangtze River province

TA 17 (8) j2161. A few years ago *Tilapia* was introduced into southern China from Viet Nam. In 1959 it was introduced in Hupeh, where the climate is too cold to keep the *Tilapia* during the winter in the open. Methods are being investigated for protecting the fish during the cold winter months. These methods are briefly indicated.

F
8-01496

Anon. (1962)
Survey China Mainland Press, (2686) : 23
 Fish breeding in rice fields brings bigger crop yield

TA 17 (8) j2164. Experiments carried out in Hupeh province (China) have shown that the culture of carp spp. in irrigated rice fields is an economic proposition. The fry should be at least 2.5 cm long. A water level of 7.5 cm is sufficient, provided ditches and small pools have been dug where the fish can take shelter. Fish culture had a beneficial influence on the rice plants and hampered weed development. Fish culture in rice fields is strongly recommended.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Film (d.u.)

Indiana Univ. Audio-Visual Center

Crayfish anatomy

F
8-01497

11 min, sound, colour. One of series of teaching films, describes external features, functions of claws, swimmerettes, and broad uropods, and demonstrates dissection.

Collette, B. B. & R. W. Yerger (1962)

Tulane Stud. Zool., 9 (4) : 213-30

The American percid fishes of the subgenus *Villora*

F
8-01498

Villora Hubbs & Gannon is removed from *Hololepis* Putnam where placed by some authors. Variation in number of meristic characters between populations of *Etheostoma* (*Villora*) *edwini* (Hubbs & Gannon) is considered. *E. okaloosae* (Fowler) is resurrected from the synonymy of *E. swaini* (Jordan).

Collette, B. B. (1962)

Tulane Stud. Zool., 9 (4) : 115-211

The swamp darters of the subgenus *Hololepis*

F
8-01499

Subgenus *Hololepis*, genus *Etheostoma*, incl. eight forms of small specialized forms. *E. edwini* replaced in subgenus *Villora* Hubbs & Gannon.

Hobbs, H. H., Jr. (1962)

Tulane Stud. Zool., 9 (5) : 273-93

Notes on the affinities of the members of the Blandingii Section of the crayfish genus *Procambarus* (Decapoda, Astacidae)

F
8-01500

Discussion of hypothetical procambarid ancestor followed by summary of the composition of the genus *Procambarus*, composed of 108 spp. and sub-spp. grouped into ten sections. Key is provided for the assignment of crayfishes to the sections, and an additional one for the seven groups of the Blandingii Section which comprises 55 spp. and sub-spp. Diagnosis, provided for each group, precedes list of spp., the range and habits of each, and a discussion of relationships within the group. First pleopods of representative first-form males of each sp. are ill.

Sogandares-Bernal, F. (1962)

Tulane Stud. Zool., 9 (5) : 319-22

Microphallus progeneticus, a new apharyngeate progenetic trematode (Microphallidae) from the dwarf crayfish, *Cambarellus puer*, in Louisiana

F
8-01501

The following astacid decapods from Louisiana were examined and found uninfected with *M. progeneticus*: *Cambarellus shufeldti* (Faxon, 1884); *Orconectes clypeatus* (Hay, 1899); *O. lancifer*, (Hagen, 1870); *Procambarus blandingi acutus* (Girard, 1852); *P. clarki* (Girard, 1852); and *P. penni* (Hobbs, 1951). Metacercariae of *M. opacus* were found in *P. clarki* from localities in which *M. progeneticus* was collected.

- Yerger, R. W. & R. D. Suttkus** (1962) F
8-01502
Tulane Stud. Zool., 9 (5) : 323-30
 Records of freshwater fishes in Florida

Extensive collections in western Florida have added 9 spp. of freshwater fishes to the faunal list of state: *Moxostoma duquesnei*, *M. carinatum*, *Hybopsis aestivalis*, *Notropis welaka*, *N. zonistius*, *N. leedsi*, *Etheostoma histrio*, *E. parvipinne*, *E. okaloosae*. Specimens of *Moxostoma* from the Apalachicola River are tentatively identified as *M. duquesnei*. Considered as synonyms for many years, both *Notropis welaka* and *Etheostoma okaloosae* are now recognized as valid spp.

- Regier, H. A.** (1962) F
8-01503
 Thesis, Cornell Univ., U.S., 436 p.
 Some aspects of the ecology and management of warm-water fish in New York farm ponds

DA 22 (12) : 4445-6. Objective of study to construct factual basis for fish-stocking and management. Incl. analysis of biological data on 65 experimental fish populations of various sp. combinations; contains information on pond costs and pond-owner preferences and practices. Sp. combinations tested incl.: largemouth bass and bluegills, golden shiners, channel catfish and yellow perch. Data on survival, growth, reproduction, standing crops, harvests, and population condition were summarized. Numerous ecological interrelationships were postulated and explored.

- Schwassmann, H. O.** (1962) F
8-01504
 Thesis, The Univ. of Wisconsin, 263 p.
 Experiments on sun orientation in some freshwater fish

DA 22 (12) : 4446-7. Investigates centrarchids and cichlids. Experiments show influence of environmental factors, such as the daily light cycle, length of photoperiod, and sun's altitude. Fish were trained in circular tank to find an open box in a specific compass direction, in which they could hide. Fish were trained inside a building to swim at a certain angle to an electric light which was thought to substitute for the sun. Green sunfish and cichlids were raised from the egg stage in a light/dark cycle of artificial light. After training to the electric light indoors, these fish altered the trained angle when tested under the sun at different times of the day. Machine was designed and employed successfully to condition fish to sun movement which appeared to be reversed in direction from the clockwise movement in the northern hemisphere. Hypothetical models which serve to ill. "sun-compass" behavior are suggested and criticized. The role of the optic tectum, the dorsal midbrain, as a possible coordinating center for sun orientation is discussed. A preliminary experiment, to find evidence for a discrete projection of retinal areas on to surface of optic tectum is described.

- Gofman-Kadoshnikov, P. B. et al.** (1961) F
8-01505
Med. Parazit., Moskva, 30 (1) : 92-5
 (*Diphyllbothrium* infection in the Moscow region). Ru En

HA 31 (2) 1015. Plerocercoids found in two of 56 perch, two of 21 ruff and in 11 of 25 pike from the Moscow canal. This is the first record of *D. latum* from this canal but human cases of infection have been observed in this area since 1951-52.

Sawyer, T. K. (1961)

F
8-01506

Proc. helm. Soc. Wash., 28 (2) : 175-6

The American otter, *Lutra canadensis vaga*, as a host for two species of trematodes previously unreported from North America

HA 31 (2) 1102. *Bashkirovitrema incrassatum* from stomach and *Enhydri-diplostomum alarioides* from small intestine reported in South Georgia. Suggests that either the subfamily Alariinae be suppressed, as first proposed by Chandler & Rausch (1946), or that new criteria be established to justify its retention.

Khamidullin, R. I. & T. E. Kostina (1960)

F
8-01507

Uchen. Zap. kazan. vet. Inst., 79 : 227-32

(Treatment of opisthorchiasis). Ru

HA 31 (2) 1140. Cyprinidae from Kama and Volga Rivers harboured *Opisthorchis felineus metacercariae*.

Baer, J. G. & A. Fain (1960)

F
8-01508

Acta trop., Basel, 17 (4) : 374-7

Observations sur le développement de *Bothriocephalus (Cleistobothrium) kivuensis* Baer & Fain 1958 (Observations on the development of *Bothriocephalus (Cleistobothrium) kivuensis* Baer & Fain 1958)

HA 31 (2) 1265. Eggs obtained from gravid proglottides of four tape-worms collected from *Barbus altianalis altianalis*. Eggs, and, in one experiment, free coracidia were placed in tubes with *Eucyclops rubescens* and both were able to establish an infection. Infected cyclops were introduced into mouths of *Tilapia* and three goldfish, but no plerocercoids were recovered.

Williams, J. B. (1961)

F
8-01509

J. Helminth., 35 (1-2) : 181-202

The dimorphism of *Polystoma integerrimum* (Frölich) Rudolphi and its bearing on relationships within the Polystomatidae—Part 3.

HA 31 (2) 1364. Results obtained from reinvestigation of *P. integerrimum*, *Protopolystoma xenopi* and *Parapolystoma bulliense* are discussed and an account given of previous controversies in the literature on *Polystoma* and related genera. Similarity in structure between *Polystoma* and the Hexabothriidae is indication of possible origin of Polystomatidae from an ancestral stock parasitic on the gills of primitive fish.

Caballero y C., E., F. Garcia-Torres & L. Flores-Barroeta (1960)

F
8-01510

Mem. Acad. Cienc. 'Ant. Alzate', 59 (1-2) : 89-96

Investigaciones sobre dermatitis esquistosómica en el Lago de Pátzcuaro, Michoacán, México. 2. *Physa mexicana* Philippi var. *tolucensis* (Mollusca) como hésped de una xifidiocercaria (Investigations on schistosome dermatitis in the lake of Pátzcuaro, Michoacán, México. 2. *Physa mexicana* Philippi var. *tolucensis* (Mollusca) a host of a xiphidiocercaria)

Cercaria mexicana n.sp., a xiphidiocercaria, was found in *Physa mexicana* var. *tolucensis* in Mexico. Co 9-07499.

F
8-01511

Damian, R. T. (1961)
J. Parasit., 47 (3) : 503-8

Macravestibulum kraatzii n.sp. (Trematoda: Pronocephalidae), with revision of the genus *Macravestibulum* Mackin, 1930

HA 31 (2) 1374. Following examination of the holotypes and/or paratypes of *M. eversum*, *M. kepneri* and *M. obtusicaudum*, emends diagnosis of genus. There exist certain differences between the paratypes and Horsfall's specimens collected from experimentally infected freshwater turtles. *M. kraatzii* n.sp. is described and figured from *Pseudemys floridana* from Florida, U.S.A.

F
8-01512

Dollfus, R. P. (1960)
Ann. Parasit. hum. comp., 35 (5-6) : 704-12

Sur *Hemiurus communis* T. Odhner 1905 (Trematoda Digenea, Hemiuridae) (On *Hemiurus communis* T. Odhner 1905 (Trematoda Digenea, Hemiuridae))

HA 31 (2) 1375. Examines 12 of Odhner's original preparations, described in 1905 but not figured, and gives line drawings. Some of Odhner's specimens were from *Salmo trutta* and *Raniceps raninus*, hosts which he did not record.

F
8-01513

Motwani, M. P. & C. B. Srivastava (1961)
Indian J. Helminth., 13 (2) : 93-9

On two phyllodistomes from the urinary bladder of siluroid fishes (Trematoda: Gorgoderidae)

HA 31 (2) 1391. *Phyllodistomum chauhani* n.sp. from *Mystus (Osteobargus) aor* and *M. seenghala*. *P. tripathi* n.sp. from *Bagarius bagarius*. Host-parasite list of Indian spp. of the genus *Phyllodistomum* is given.

F
8-01514

Spasskaya, L. P. (1961)
Acta vet. hung., 11 (3) : 311-37

(Cestodes of birds of Tuva—4. Hymenolepididae of aquatic birds). *Ru De*

HA 31 (2) 1416.

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Ghittino, P. (1961)
Riv. Parassit., 22 (3) : 193-204

Su una capillariosi epatica in trote di allevamento e in altri teleostei delle acque libere del bacino del Po in Piemonte, con descrizione di una nuova specie (*Capillaria eupomotis*) (Hepatic capillariosis of trout in hatchery and of other teleosts in the natural waters of the Po valley in Piedmont with the description of a new species, *Capillaria eupomotis*). *En*

HA 31 (2) 1437. Trout in hatchery in Po valley found to have ova and helminths in liver. In the same region *Phoxinus phoxinus*, *Eupomotis gibbosus*, *Leuciscus soffiua muticellus* and *L. cephalus cabeda* were found to be heavily infected. The nematode was identified as a new sp., *Capillaria eupomotis* n.sp. and is described in detail and figured.

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8-01516
Parasitology, 51 (1-2) : 237-40

Two new species of cryptobiotic (anabiotic) freshwater nematodes, *Actinolaimus hintoni* sp. nov., and *Dorylaimus keilini* sp. nov. (Dorylaimidae)

HA 31 (2) 1446. Described and figured. Specimens occurred in dried mud at 2,500 ft at Anara, northern Nigeria.

- Atwood, H. L.** (1962) F
8-01517
Nature, Lond., 195 (4839) : 387-8

Depolarization and tension in crustacean muscle

Muscle used in these experiments was the abductor muscle of the first walking leg of *Astacus fluviatilis*.

- Chapman, D. I.** (1962) F
8-01518
Nature, Lond., 195 (4839) : 401

Species of Siphonaptera from a British otter

Siphonaptera recorded from majority of British wild mammals. Notable exceptions are Cetacea; Pinnipidea; *Myotis bechsteini* Kuhl, *Myocastor coypus* Mol., and *Lutra lutra* L. On 24 Aug. 1961 a dead female *L. lutra* L. was found with a flea, a female *Spilopsyllus cuniculi* Dale.

- Mills, A. R.** (1962) F
8-01519
New Scient., 15 (302) : 464-5

Tropical river blindness

In some African and Central American riverside fishing communities whole populations are infected by onchocerciasis. Treatment is effective but requires skilled doctors; control of *Simulium* which transmits the disease may be the solution.

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New Scient., 15 (302) : 469

Letters—The crayfish's other eye

- Weatherley, A. H.** (1961) F
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Thesis, Univ. of Glasgow, U.K.

Some effects of high temperatures on the perch *Perca fluviatilis* L., and their importance in influencing its distribution.

Upper lethal temperature determined experimentally in relation to acclimatization temperature. Information thus obtained combined with knowledge of distribution of spp. in nature, to determine extent to which high temperature limits its proximity to the equator. Analysis aided by knowledge of distribution of *P. flavescens* (Mitchill) of N. America. Concluded that distribution of both controlled by two principal factors. First is inability to live in streams, or sections thereof, with steep gradients. Second, high water temperature in midsummer, appears to exercise its effects in at least two extensive regions of the world.

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- Roy, B. B.** (1962)
Proc. nat. Inst. Sci. India., 28B (1) : 13-28
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- Anterior interrenals and pituitaries of *Cirrhina mrigala*, *Catla catla* and *Labeo rohita* described. Control of ACTH secretion in fishes discussed and the importance of the neurosecretory system—central and caudal—stressed.
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 Some relationships within fish populations causing fluctuations in production
- Symposium on new or little explored aspects of fishery research.
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- Swingle, H. S.** (1961)
Proc. Pacif. Sci. Congr., 9 (10) : 72-5
 Relationship of pH of pond waters to their suitability for fish culture
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- Prowse, G. A.** (1961)
Proc. Pacif. Sci. Congr., 9 (10) : 76-9
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Proc. Pacif. Sci. Congr., 9 (10) : 80-3
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Agro, 1 (2) : 94 p.

Sequias, inundaciones y aprovechamiento de las lagunas bonaerenses con especial referencia al desarrollo futuro de la piscicultura (Dryness, floods and utilization of the lagoons in the Buenos Aires area, with especial reference to the future development of fishculture)

Describes the evolution of the lagoons in relation with the physical environment and the engineering problems involved. Contains references to different methods of control of aquatic plants and analyses the prospects for fish culture, with special reference to *Austromenidia bonariensis*, *Patagonina hatcheri*, *Percichthys* sp., *Hoplias malabaricus* in the area.

Horsfall, W. R. (1962)

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New York, Ronald Press Co., 425 p.

Medical entomology: arthropods and human disease

Incl. reference to aquatic forms.

Machado-Cruz, J. A. (1962)

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Publ. Inst. Zool. Nobre, (82) : 18 p.

Sur l'apparition écente de "bacterial gill disease" en Europe et sa caractérisation histopathologique (On the recent appearance of "bacterial gill disease" in Europe and its histopathological characteristics)

Notes on an outburst in a fish pond in north Portugal. Discusses symptomatology of the disease in *Salmo irideus* and *S. trutta*. Incl. remarks on prophylactic measures.

Maestrone, G. & M. A. Benjaminsson (1962)

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Nature, Lond., 195 (4842) : 719-20

Leptospira infection in the gold fish (*Carassius auratus*)

Important role of waterholes, rice fields, swamps, slow-moving streams and sewers in the epidemiology of human and animal leptospirosis has been established. Ability of *Leptospira* to penetrate bodies of fish living in contaminated water has been determined in experiments reported here; course of infection in host's tissues followed.

Ophel, I. L. & J. M. Judd (1962)

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Nature, Lond., 194 (4834) : 1187-8

Absorption of radiostrontium by the gills of freshwater fish

Account of experiments carried out on *Carassius auratus*.

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Randall, D. J. (1962)
Nature, Lond., 195 (4840) : 506

Effect of an anaesthetic on the heart and respiration of teleost fish

Properties of Sandoz "M.S. 222" compound, a meta-amino-benzole acid ethyl ester in the form of a soluble salt have led to its widespread use in studies of fish physiology. Electrocardiogram, respiratory rate, and respiratory amplitude were recorded in tench, *Tinca tinca* L., held in a tank. Handling caused considerable rise in heart-rate. Effect of "M.S. 222" was to produce an increase in heart-rate, increase being more marked at higher concentrations.

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Matty, A. J. (1962)
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Effects of mammalian growth hormone on *Cottus scorpius* blood

Has been shown during work on hypophysis-pancreas relations in teleost fish that mammalian growth hormone affects blood glucose, protein and urea.

FG
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Boyd, E. S. & L. C. Gardner (1962)
Science, 136 (3516) : 648-9

Positive and negative reinforcement from intracranial stimulation of a teleost

Tests in which animal receives or avoids direct electrical stimulation of its brain according to its position in the tank as well as tests of free operant behavior demonstrate the existence of both positively and negatively rewarding areas in brain of goldfish.

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Scarborough, B. B. & R. G. Addison (1962)
Science, 136 (3517) : 712-3

Conditioning in fish: effects of X-irradiation

Primary purpose of study to observe effects of large single dosages of x-rays on rate of acquisition and retention of conditioned responses and to determine lethal dosage. Golden shiner minnows, *Notemigonus crysoleucas* (Mitchill), were used.

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Fleming, W. R. & A. H. Meier (1961)
Comp. Biochem. Physiol., 2 (1) : 1-7

The effect of mammalian parathormone on the serum calcium levels of *Fundulus kansae* and *Fundulus catenatus*

Comparative study of these 2 spp. from Ozark and Missouri.

Holden, A. V. (1962)FG
8-01539*Ann. appl. Biol.*, 50 (3) : 467-77A study of the absorption of ^{14}C -labelled DDT from water by fish

Distribution of DDT in brown trout poisoned by low aqueous concentrations studied. Direct-mount technique for determining carbon-14 activity extracted from various organs is described. It is suggested that concentration of DDT present in lipids may determine toxicity to fish, explaining greater susceptibility of fish in poor condition or of low fat content. Use of static water for fish toxicity tests involving insecticides is criticized.

Gerking, S. D. (1962)FG
8-01540*Ecol. Monogr.*, 32 (1) : 31-78

Production and food utilization in a population of bluegill sunfish

Quantitative description and analysis of relation of *Lepomis macrochirus* to its benthos and entomostracan food supply in Wyland Lake, Indiana. Describes lake ecologically. Structure of fish populations, mortalities, growth and reproduction; food turnover of fish population; stomach analyses; benthos and plankton estimation, cropping and production efficiency; comparison of production rates with others in literature.

Brian, P. W. (1962)G
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Some reflexions on the present state of biology

Address of the President of the Association of Applied Biologists delivered to the annual general meeting on Friday, 13 Apr. 1962. Deals with population and food resources and production problem.

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8-01542*Deep-Sea Res.*, 9 : 83-108

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First issue of list of about 700 references in order of main subject headings, mostly to 1960 or 1961 publications, but some back to 1957.

International Conference on Prevention of Pollution of the Sea by Oil (1962)M
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London, 98 p.

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Nichols, M. (1962)*M
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Phycologia, 1 (4) : 167-9
 Sokichi Segawa (1904-1960)
 Obituary of this Japanese marine botanist with a list of his publications.
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- Ommanney, F. D.** (1962)
Proc. Indo-Pacif. Fish. Coun., 9 (3) : 22-9
 The organization of fisheries scientific research
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 The public health significance of the recent outbreaks of poisonings by
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 A bibliography of the North Atlantic redfish
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 CR 61-11996.

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Collier, A. & A. Murphy (1962)

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Science, 136 (3518): 780-1

Very small diatoms: preliminary notes and description of *Chaetoceras galvestonensis*

Several spp. and genera of diatoms isolated from Gulf of Mexico waters at Galveston. Organisms were isolated in unialgal cultures, and very rapid growth rates were observed. Environmental and experimental implications are pointed out. New sp. is described and figured.

Silva, P. C. (1961)

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Phycologia, 1 (2-3): 61-145

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Co 62-00554. Incl. references published in 1958 but unintentionally omitted from 62-00554.

Koster, J. Th. (1961)

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Phycologia, 1 (4): 164-6

Marie Françoise Emilie Nicolai (1900-1961)

An obituary of this Dutch botanist. Incl. list of her publications.

Papenfuss, G. F. (1961)

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Phycologia, 1 (4): 172-82

Nils Eberhard Svedelius: a chapter in the history of phycology

An obituary of this eminent Swedish botanist, with a brief review of scientific activity; incl. bibliography.

Kuenen, D. J. (Ed.) (1961)

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Leiden, E. J. Brill, 118 p.

Symposium—The ecological effects of biological and chemical control of undesirable plants and animals. 8th Technical Meeting IUCN, Warszawa 15-24/7/60

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Idyll, C. R. (1962)

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Proc. Indo-Pacif. Fish. Coun., 9 (3): 17-21

The establishment of a national program of fisheries research

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Anon. (1962) MF
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News of the secretariat—Food control in the Mekong Delta

With assistance of UN Special Fund, possibility of building flood-control dam on Tonle Sap is to be studied in detail. Project involves construction of mathematical model of delta with a view to determining the influence that the proposed dam would have not only on flood waters, but also on sylviculture, fisheries, navigation and power production.

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An annotated bibliography of climatic maps of Colombia

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Vanishing animals: preserving nature's rarities

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In 8-01557 : 1-9

The ecological effects of chemical and biological control of undesirable plants and insects—General introduction

Introduction to 8-01557.

Wortley, G. (1962) G
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In 8-01127 : 295-308

The impact of legal control of discharge of radioactive materials on the responsible departments

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In 8-01127 : 309-21

Legal controls in the United States to protect the public from exposure from radioactive material

Roberts, I. C. & S. H. Small (1962)

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In 8-01127 : 322-44

Impact of legal control of discharge of radioactive materials on the responsible departments

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Freed. Hunger Camp. bas. Stud., (1) : 80 p.

Weather and food

A general review with only brief specific reference to fisheries and aquatic resources.

Ferreri, C. (1959)

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Ann. Fac. Econ. Comm. Palermo, 13 (1959) : 51-136

(On the schemes of logistic curves). *It*

STA 3 (3) 3/301. Analyses some important theories on growth of population. Generalizing the Verhulst hypothesis he obtains new schemes. Shows sum of n simple logistic cycles may be represented by a generalized curve having upper limits equal to the sum of the upper limits of n cycles. Remarks on opportunity of generalizing Vinci's model, assuming upper limit of population to be variable, and obtains new models under hypothesis of an upper limit considered as a function of time and population size. In appendix, discusses mathematical implications in detail.

Lunetta, G. (1959)

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(On the estimation of parameters of simple logistic functions). *It*

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Zelon, M. & M. C. Dannemiller (1961)

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Technometrics, 3 : 29-49

The robustness of life testing procedures derived from the exponential distribution

STA 3 (3) 3/377. Paper studies behaviour of several statistical life-testing procedures based on the exponential failure law if the true failure law is the Weibull distribution. It is found that these statistical techniques, which are widely used, are very sensitive to departures from initial assumptions.

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Williams, E. J. (1961)

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Aust. J. biol. Sci., 14 : 598-604

The distribution of larvae of randomly moving insects

STA 3 (3) 3/458. Concerned with the spatial distribution of larvae laid by moths released from some central point so that they are themselves distributed as a circular normal distribution, for case where moths are equally mobile, and move independently at random; each female lays eggs at a constant daily rate; moths have equal chance of death in any period. Points out that, as in other cases for which a quantitative or mathematical law fitting the phenomenon does not provide conclusive evidence as to its causes, two other sets of assumptions result in the same distribution for the larvae. Concludes with estimation of scale parameter of distribution and derivation of asymptotic variance of this when centre of distribution is known. Theory applicable to movements of aquatic organisms.

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W. Ind. Fish. Bull., (2) : 58 p.

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Notes and comments—The new 'Discovery' enters the water

Launching of Britain's new oceanographic "flagship".

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New Scient., 15 (294) : 11
Notes and comments—The hydrographer collects deep-sea soundings

To help navigators, produced a series of oceanic plotting sheets on which the tracks of a ship and the soundings it records can be recorded.

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Anon. (1962)

Science, 136 (3521) : 1043
Announcements

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Deacon, G. E. R. (1962)

Mar. Obs., 32 (197) : 125-7

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New Scient., 15 (301) : 409

Science in overseas industry—United States. Anchor that buries itself in the seabed

M
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Fires itself into seabed to provide a permanent, very strong anchorage up to 300 times its own weight, at low cost, is being tried out. Applications incl. the anchoring by guy-wires of offshore drilling towers, marine laboratories. Named Seastaple, being developed by Advanced Systems Development Division of Pneumo Dynamics Corp., El Segundo, California.

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 La campagne du 'Thalassa' en mer de Norvège et en mer de Barentz
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 Describes and ill. this equipment, and its operation from 'Calypso'.

Rivoire, J. (1962) M
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 Notes on mesoscaphes, diving saucer, underwater sealed tanks.

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Rep. Dir. Agric. Fish. Bermuda, 1961 : 14 p.
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 to set aside area of coral reef as a reserve.

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Mirador, (10) : unpag. Repr., 7 p.

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Monaco, IHB, 5 p.

Final report on the financial administration of the International Hydrographic Bureau from 1st January 1957 to 31st December 1961

Knox, R. W. (1962)

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Résultats scientifiques des campagnes de la 'Calypso' (Scientific results of the 'Calypso' cruises)

Contains 8-02217 to 8-02223, 8-02183, 8-02407.

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Educ. Ser. Md Dep. Res. Educ., (52) : 21 p.

Final report 1941-1961 of the ...

Functions of the commission and the department, together with its staff and its physical assets, have been transferred to the University of Maryland in the form of the newly created Natural Resources Institute. Summary of results achieved by the department under the direction of the commission since 1941.

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U.S. National Science Foundation (1961)

Washington, NSF (61-68) : 528 p.

Specialized science information services in the United States—A directory of selected specialized information services in the physical and biological sciences

Contains, in subject order, notes on names, addresses, scope, facilities, services, publications of various organizations, many of which are of relevance to fisheries and aquatic sciences research, especially under subject headings: Conservation; Biological sciences; Earth sciences; Health, water pollution; General science.

MF

8-02028

Germany. Federal Republic. Bundesministerium für Ernährung, Landwirtschaft & Forsten (1962)

Inform. Fischw. Ausl., 12 (1) : 55 p.

Co 62-01161.

MF

8-02029

Campbell, B. (1962)

New Scient., 14 (292) : 663

Animals of Britain: an illustrated series

Re 8-02042 and 8-02002.

MF

8-02030

Komissiiia po Rybokhoziaistvennomu Issledovaniuu Zapadnoi Chasti Tikhogo Okeana. Postoiannyi Sekretariat (1960)

Peking, China, 86 p.

Materialy chetvertogo plenuma komissii po rybokhoziaistvennomu zapadnoi chasti Tikhogo okeana (Na piati iazykakh) (Proceedings of the fourth meeting of the Commission for Fisheries Investigation of the Western Pacific—In 5 languages)

Co 58-6762. Contains short account of meeting; texts of speeches of introduction and welcome; reports and summing up by chairman, vice-chairman and secretary; financial report, resolutions and recommendations for collaboration; reports of activities of national sections; program of work of the subject sections; recommendations for publication of report and contributed papers of the meeting. Contains also list of titles and authors of scientific contributions to the meeting; recommended amendments to and resolutions concerning article 2 of the agreement, its preamble, and point 6 of the rules of procedure; financial contributions of members, and preparation and publication of proceedings of this and future meetings of Commission.

Australia. CSIRO. Department of Primary Industry.
Fisheries Division (n.d. 1962)
 Canberra, 255 p.

MF
 8-02031

Fisheries field officer's handbook

Based on course for fisheries field officers held at CSIRO, Marine Laboratory, Cronulla, NSW, 1961. Compilation prepared from lectures given, and from notes used in practical classes. Deals with methods, chiefly those used in field, of investigating resources to obtain information required by government for the purposes of management and regulation. Glossary of technical terms incl. Main chapter headings are: Role of governments in fisheries—fact finding, policy making for the industry, development, regulation, administration, part played by fisheries field officers; Fishery resources—identification, location, populations, behaviour, magnitude and fluctuations, methods used in fisheries biology; Measuring catch and effort—importance to economist, to fisheries biologist, monthly catch returns, fishermen's log books, statistical methods; Fishing operations—description and classification of fishing gear, characteristics of gear in relation to fishing power and selectivity, description and classification of fishing operations, description and classification of boats; description and classification of shore facilities, fish handling and storage.

Pacific Marine Fisheries Commission (n.d. 1961?)
Rep. Pacif. Mar. Fish. Comm., 1960, (13) : 60 p.

MF
 8-02032

Meetings, actions taken, finances. Appendices on status of the Pacific coast albacore fishery, status of the Pacific coast crab fishery, of the pink shrimp fishery of the Pacific coast, of the groundfish fisheries of the Pacific coast, of the 1960 ocean salmon fishery and a review of past landings, Oregon crab seasons and their effect on the quality and quantity of crabs landed; northern Oregon—Washington shrimp studies; northern California shrimp study; migrations of English sole, *Parophrys vetulus*, on the Pacific coast of US; coastal movements of petrale sole as determined from tag recoveries; report on the Washington—Oregon spring troll chinook tagging; the sport fisheries for salmon in Washington, Oregon and California; use of and comparative hooking mortality between treble and single hooks.

Canada. Fisheries Research Board of (1962?)
Rep. biol. Sta., St. Andrews, 1961–62 : 227 p.

MF
 8-02033

Annual report and investigators' summaries 1961–62

Lists staff and publications for the station. Director gives short summaries of each subject of investigation; more detailed account by the staff on "lobster, molluscan shellfish, groundfish, herring, trout, salmon, inshore cod project, pollution, fisheries oceanography, smelt, mathematical statistics"—stock assessments.

McKernan, D. L. (1961)
Proc. Gulf Caribb. Fish. Inst., 13 (1960) : 1–21

MF
 8-02034

The role of international commissions in world fisheries

Considers fishing problems of international nature, and means for their solution, participation of the US in various commissions and their achievements.

GENERAL

FAO. Conference (1962) MF
Rep. Conf. FAO, 11 (1961) : 157 p. 8-02035

No 60-328me, containing commentary on Fisheries Division program and work and budget for 1962-63.

Germany. Federal Republic. Bundesministerium für Ernährung, Landwirtschaft & Forsten (1962) MF
Inform. Fischw. Ausl., 12 (6-7) : 57 p. 8-02036

Co 62-01161.

France. Conseil Supérieur de la Pêche (1961) MF
Bull. Cons. sup. Pêche, (46) : 138 p. 8-02037

Co 62-03449.

IPFC (1962) MF
Curr. Aff. Bull. Indo-Pacif. Fish. Coun., (34) : 43 p. 8-02038

Co 62-03447.

Klassen, C. W. (1962) MF
Publ. Hlth Pap., (13) : 9-19 8-02039
 The Water Pollution Control Agency: legal basis, administration, regulations and staffing

CR 62-03413.

Germany. Federal Republic. Bundesministerium für Ernährung, Landwirtschaft & Forsten (1962) MF
Inform. Fischw. Ausl., 12 (2) : 51 p. 8-02040

Co 62-01161.

Geyer, J. W. C. (1962) MF
S. Afr. J. Sci., 58 (7) : 206-7 8-02041
 The South African Fauna Research Organization

Note on formation of this new body, its aims, structure and officers, incl. sub-committee on salt- and fresh-water animals.

Neal, E. G. (1962)* F
 London, Sunday Times Publ. Ltd., "Animals of Britain: an illustrated series", 8-02042
 No. 8
 Otters

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- Anon.** (1962) F
8-02043
G. Pesca, 12 (13-14) : 3, 6
 Centro ittigenico sperimentale in Valtellina (Ichthyogenic experimental center in Valtellina). *It*

- Petrik, M.** (1962) F
8-02044
Publ. Hlth Serv., (13) : 39-51
 Organization of surveys
 CR 62-03060.

- Moore, W. H.** (1961) FG
8-02045
Proc. Instn Electron., 4 (2) : 38-42
 An eighteen-point fish movement recorder

Apparatus devised to detect and record movement of trout living under conditions as nearly natural as possible. Fish were individually caged and kept on the bed of lake Windermere, in water 2-4 metres deep. Problem was to detect fish's movements without it being conscious of detecting device. Experiment showed that it was possible to detect conductometrically.

- Anon.** (1961) G
8-02046
Trans. Amer. geophys. Un., 42 (4) : 464
 7th general assembly—Pan American Institute of Geography and History

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

- France. Comité Central d'Océanographie et d'Étude des Côtes** M
8-02047
 (1959)
Cah. océanogr., 11 (5) : 265-370

Contains sections on general information: technical notes—8-01119 and 8-01120; documentation received by secretariat, and tables and diagrams of observations—8-01121.

- Anon.** (1962) M
8-02048
New Scient., 13 (279) : 670-1
 Reducing discharge of radioactivity in the sea

- Anon.** (1962) M
8-02049
New Scient., 13 (282) : 11-2
 Seychelles observations show value of ocean survey

International Indian Ocean expedition. H.M.S. 'Owen' is completing magnetic, gravity and topographical survey of north-west corner of ocean between Mauritius, Bombay and Aden.

- Loncarevic, B. D. & D. H. Matthews** (1962) M
8-02050
New Scient., 14 (290) : 513-5
 Geographical reconnaissance of the Arabian Sea

As preliminary contribution to International Indian Ocean expedition, Royal Navy survey ship 'Owen' explores little-known waters of the Arabian Sea. First impressions indicate important discoveries about the eastern margin of Africa.

- Anon.** (1962) M
8-02051
New Scient., 14 (284) : 525
 USSR—Arctic tidal power

Plans approved for the construction in 1963 of an experimental tidal power station at Kislogubsk on the shores of the White Sea.

- Anon.** (1962) M
8-02052
New Scient., 14 (292) : 658
 Where the Cromwell Current goes

- Fairbridge, R. W.** (1962) M
8-02053
New Scient., 15 (298) : 242-5
 Sea-level and climate

Long-term changes in absolute sea-level can be correlated with variations in general climate. Radiocarbon dating of shells along old beachlines made possible precise history of shoreline changes, and from this future climatic trend can be calculated.

- Anon.** (1962) M
8-02054
New Scient., 15 (298) : 263
 Trends and discoveries—A preliminary Soviet map of the Indian Ocean

Summarizes information on topography of ocean obtained by 'Vityaz' during two voyages in 1959-60 and 1960-61, from an article by P. Zamotski in *Priroda*.

- Muraour, P., G. Boillot & J. Merle** (1962) M
8-02055
Bull. Inst. océanogr., Monaco, (1228) : 10 p.
 Etude séismique par réfraction au large de Roscoff (Finistère) (Seismic study by refraction off Roscoff, Finistère). En

Geological studies made evident the presence, 6 km from the isle of Batz, of holes carved in the Eocene limestone, and the bottom of which dredging revealed to be composed of red clay. Along a profile of about 9 km, 16 stations were shot, among which 11 stations provided available records. Resulting time-distance curve shows but one refracting layer, the granitic one.

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M

Hachey, H. B. (1962)

8-02056

Bull. Fish. Res. Bd Can., (134) : 120 p.

Oceanography and Canadian Atlantic waters

Submarine topography; oceanographic history; some basic principles; circulation in the western North Atlantic; atmospheric circulation over the western North Atlantic; interactions between sea and atmosphere; ice problems off the Atlantic coast; oceanographic environments; Canadian problems in oceanography; Canadian organization for oceanography; general bibliography of Canadian contributions; selected bibliography.

M

Anon. (1962)

8-02057

New Scient., 14 (293) : 706

Science in British industry—Stable platform for deep sea work

New type of marine platform which provides a stable deck for operations in high seas announced by Intercontinental Marine Development Ltd., and Cammell Laird & Co. Experimental models of platform have been demonstrated. Tests completed successfully in the National Physical Laboratory's Ship Tank at Feltham and an experimental programme has been carried out at the Imperial College of Science and Technology. Platform was shown at Institution of Civil Engineers' Conversazione.

M

Gaskell, T. (1962)

8-02058

New Scient., 15 (294) : 13-5

Prospecting for oil in the North Sea

Seismic exploration begins, over a large area of the sea lying between the oilfields of the English midlands and those of Holland and Germany, in the hope of detecting formations in the underlying strata which might indicate the presence of oil or natural gas.

M

Pequegnat, W. E. (1962)

8-02059

Science, 135 (3507) : 1000-5

Meetings—Shallow-water oceanography

No 61-070me, 61-071me and 61-072me. Report of the meetings with brief descriptions of the papers contributed, under main headings: Description of research and training activities planned; Discussion of individual or group research projects; Description of new techniques or instruments applicable to shallow water oceanography.

M

Lewis, D. H. (1962)

8-02060

Mar. Obs., 32 (197) : 131-4

Notes on heavy weather in the Atlantic (1960) and North Sea (1961)

M

Anon. (1962)

8-02061

Mar. Obs., 32 (197) : 138

Effects of the apparent wind on shipboard

G.A.T. (1962)

M
8-02062

Mar. Obs., 32 (197) : 138-45

Notes on ice conditions in areas adjacent to the North Atlantic Ocean from January to March 1962

NODC (1962)

M
8-02063

Washington, D.C., NODC Publ. M-2, 103 p.

Processing physical and chemical data from oceanographic stations

Describes methods used at NODC for reducing processed data to standard format. Intended also for use by other agencies or contributors interested in furnishing oceanographic data to or making their data systems compatible with NODC. Outline of format of computed card is incl. and a set of tables is appended, giving codes for sea-state, windspeed, wave height and direction, water colour, depths, Masden squares, country code, weather, cloud, visibility, oxygen, silicates, phosphorus, nitrate, nitrite, salinity-chlorinity, and various conversion factors and tables.

Joseph, E. B., W. H. Massmann & J. J. Norcross (1962)

M
8-02064

Contr. Va Fish. Lab., 1960-61 (95)

Investigations of inner continental shelf waters off lower Chesapeake Bay—Part 1. General introduction and hydrography

CR 62-00884.

Miyake, Y. et al. (1961)

M
8-02065

J. Radio Res. Labs., 2 (1) : 25-8

Caesium-137 and strontium-90 in sea water

WPA 35 (7) 1332. Concentrations in northwest Pacific Ocean were determined in 1959 and 1960; values higher than in northeast Pacific and Atlantic.

Zenkovitch, V. P. (1962)

M
8-02066

Ingenieur, 's Grav., 74 : B81-9

Application of luminescent substances for sand-drift investigations in the near-shore zones of the sea

WPA 35 (7) 1345. Describes experiments in USSR, use of fluorescent substances; natural sand from beach or sea bottom is coated with colloidal film. Advantages and disadvantages are discussed.

McNamara, E. J. (1961)

M
8-02067

Wastes Engng., 32 : 74-6

A sea-going sewage works

WPA 35 (7) 1362. Sewage-treatment plant serving offshore sulphur-mining plant in the Gulf of Mexico is described. Effluent is discharged to Gulf.

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Townsley, S. J., D. F. Reid & W. T. Ego (1962) M
8-02068
U.S. Atom. Energ. Comm., TID-14420. 36 p.

The accumulation of radioactive isotopes by tropical marine organisms—
Annual report 1960-61

WPA 35 (7) 1430. Effect of light and enzyme inhibitors on uptake of phosphorus-32 and zinc-65 by mushroom coral, *Fungia scutaria*, was studied, and preliminary experiments were carried out on the ability of this coral to remove dissolved organic matter (glucose) labelled with carbon-14. Uptake of chromium-51 from sea water by alga, *Ulva lactuca*, and eggs of ascidian, *Pyura momus*, also investigated.

Miyake, Y. et al. (1961) M
8-02069
Tokyo, Met. Res. Inst., 12 p.

Penetration of artificial radioactivity in deep waters of the Pacific and vertical diffusion rate of sea water

WPA 35 (7) 1431. Studies confirmed that strontium-90 and caesium-137 of artificial origin have penetrated to depth of 5000 m in the northwest Pacific. Vertical diffusion coefficient calculated, estimated that complete vertical mixing takes about 700 years.

Herrera, J. (1961) M
8-02070
Invest. pesq., (19) : 5-15

Datos climáticos del puerto de Castellón y térmicos de las aguas costeras superficiales, en 1959 (Climatic data of the Castellón Harbour and temperature of the surface coastal waters in 1959). En

Meteorological data from harbour of Castellón—eastern coast of Spain—and temperatures of superficial waters for 1959 are summarized.

Margalef, R. & J. Herrera (1961) M
8-02071
Invest. pesq., (19) : 55-63

El nivel del mar en Castellón (Sea level in Castellón). En

Study of tides, seiches and other factors causing fluctuations in the sea level.

Fraga, F. & F. Vives (1961) M
8-02072
Invest. pesq., (19) : 65-79

La descomposición de la materia orgánica nitrogenada en el mar (Decomposition of nitrogen organic matter in the sea). En

Total organic nitrogen, dissolved organic nitrogen and volatile one were determined, and the suspended organic nitrogen was computed by difference.

Leipper, D. F. (1961) M
8-02073
Trans. Amer. geophys. Un., 42 (4) : 429-31

Oceanography—A definition for academic use

Golubeva, V. N. (1961)*

M
8-02074

Izv. Akad. Nauk SSSR (geofiz.), (5)

(On the theory of the mixed surface layer of the sea). Ru

Olevinskaia, S. K. (1961)*

M
8-02075

Izv. Akad. Nauk SSSR (geofiz.), (6)

(Contribution to theory of thermal interactions between sea, atmosphere and continent). Ru

Anon. (1961)

M
8-02076

Trans. Amer. geophys. Un., 42 (4) : 518-25

IGY bulletin—Biological oceanography in the North Polar Sea from IGY drifting station Alpha, 1957-58

Vertical distribution of physical and chemical properties, phytoplankton and organic production.

Hokkaido University. Faculty of Fisheries (1962)

M
8-02077

Data Rec. oceanogr. Obsns explor. Fish., (6) : 283 p.

Preliminary data from oceanographic, biological or exploratory-fishing researches carried out on the regular or occasional cruises of the training ships of the Faculty of Fisheries.

Perez Sori, J. A. (1962)

M
8-02078

Contr. Cent. Invest. pesq., Cuba, (16) : 27 p.

Datos oceanograficos de la Playa Habana—3. (Oceanographic data of the Playa Habana—3.). Fr

Data on salinity, pH, air and water temperature, atmospheric pressure and relative humidity.

Odhner, N. H. (1962)

M
8-02079

Bull. Inst. oceanogr. Monaco, (1230) : 15 p.

Bilateral constriction in the ocean bottoms. Fr

Remarkable revelations by American oceanographers on the chief submarine mountain chains are here taken up for explanation on the basis of constriction principle, published by author in 1934 and later. Principle shows that thermal factor, neglected previously, must be admitted as fundamental force in causing crustal movements of elevation and sinking.

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Olaniyan, C. I. O. (1961)

M
8-02080

J. W. Afr. Sci. Ass., 7 (1) : 49-58

Observations on the salinity and stratification of tidal currents in Lagos Harbour, Nigeria, with a description of a simple method for the collection of water samples at various depths for salinity determinations

Method for sampling estuaries or other bodies of water with strong currents, and preferable under such conditions to those involving the standard type of sampler. Results of determinations of samples from surface and at depths of 2, 4, 8, and 10 metres, and at four different states of the tide throughout period Jun. 1955-Jul. 1956.

Vives, F. & F. Fraga (1961)

M
8-02081

Invest. pesq., (20) : 5-16

Pesca y energía solar (Fisheries and solar energy). En

Computations between fishing and energy. Mean values for the years 1940 to 1958 of the monthly incident energy on the sea surface are computed using Mosby's formula.

Herrera, J. & R. Margalef (1961)

M
8-02082

Invest. pesq., (20) : 17-63

Hidrografía y fitoplancton de las costas de Castellón de julio de 1958 a junio de 1959 (Hydrography and phytoplankton of the coasts of Castellón from July 1958 to June 1959). En

Vetter, R. C. (1962)

M
8-02083

Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 56-63

Federal coordination of oceanography

Alexander, J. E., J. H. Steele & E. F. Corcoran (1962)

M
8-02084

Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 63-7

The seasonal cycle of chlorophyll in the Florida Straits

Issued also as: *Mar. Repr. Mar. Lab., Aberdeen*, (183).

Sette, O. E. (1962)

M
8-02085

Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 67-74

What oceanography means to fishermen

- Acara, A. (1962)** M
8-02086
Manuscr. Rep. Ser. oceanogr. limnol. Fish. Res. Bd Can., (134) : 9 p.
 On warm and cold years in the North Pacific Ocean

An attempt to show cause of variations of surface water temperature from year to year. Off coast of Japan variation with period of four to five years is known. Variations of the Kuroshio and Oyashio fronts coincide with variation of summer surface temperature. It is shown that in the eastern N. Pacific Ocean (ocean station "P") there is a similar variation, but opposite in phase. Similar regular variation observed in central equatorial Pacific Ocean and polar regions. Wind stress profiles during warm and cold years are compared in western and eastern North Pacific. Another comparison is made over whole ocean through years 1955-61. It is predicted that in eastern North Pacific warmest summers will occur in 1961 and 1962 and the coldest in 1964. Periodic warming and cooling processes may have some economic importance to fisheries and agriculture.

- Anon. (1962)*** M
8-02087
 Washington, D.C., 28 p.
 Soviet oceanographic research in the Mediterranean Sea, Indian and Atlantic Oceans

En 62-04577, 62-04817, 8-02020, and 8-02021. Available from the Office of Technical Services, Washington, D.C.

- Cambridge University. Department of Geodesy & Geophysics** M
8-02088
 (1962)
 Mimeo, 4 p.
 The total magnetic force in the north-west Indian Ocean

Mean value of the total force estimated at 451 points in the Arabian Sea area from results obtained by H.M. ships 'Owen' and 'Dalrymple' and by Project Magnet. Mathematical representation of regional trend of field determined. Contoured maps of observed means and calculated field presented.

- Miami University. Marine Laboratory (1962)** M
8-02089
 [Publ.] *Mar. Lab. Univ. Miami, (62-4) : 200 p.*
 A report of data obtained in Florida Straits and off the west coast of Florida January-June 1961

Hydrographic data collected for studies mainly concerned with kinematics of the water movements and physical environment of the shrimp population inhabiting Florida Bay.

- Czepa, O. (1962)** M
8-02090
Acta hydrophys., 7 (2) : 97-104
 Eine Methode zur Registrierung des Wellenganges (A method of registering wave-movement)

Description of equipment and tests of it.

- Picotti, M.** (Ed.) (1961) M
8-02091
Trieste, Istituto Sperimentale Talassografico
Talassografia adriatica (Adriatic oceanography). *It*

Volume with 100 numbered copies only, bringing together reprints of papers resulting from cruises organized by Trieste and Venice laboratories between Sep. 1955 and Mar. 1960. Contains 62-02371, 61-02364, 62-01760, 62-02365 to 62-02368, 8-02092 to 8-02098.

- D'Ancona, U. & M. Picotti** (1961) M
8-02092
In 8-02091

Croisière océanographique dans la mer adriatique (août-septembre 1955) (Thalassographic cruise in the Adriatic Sea, Aug.-Sept. 1955)

CR 59-3101.

- Jerlov, N. G.** (1961) M
8-02093
In 8-02091

Adriatic thalassographic cruise 1955—2. Distribution of suspended material in the Adriatic Sea. *It*

CR 59-3103.

- Picotti, M.** (1961) M
8-02094
In 8-02091

Crociera talassografica Adriatica 1955—3. Tabelle delle osservazioni fisiche, chimiche, biologiche e psammografiche (Adriatic thalassographic cruise 1955—3. Tables of physical, chemical, biological and psammographical observations). *It En*

CR 61-02655.

- Meng-Chierogo, N. & M. Picotti** (1961) M
8-02095
In 8-02091

Crociera talassografica Adriatica 1955—4. La distribuzione del rame nelle acque dell'Adriatico (Adriatic thalassographic cruise 1955—4. Copper distribution in Adriatic Sea's waters). *It En*

CR 61-02656.

- Faganelli, A.** (1961) M
8-02096
In 8-02091

Nota preliminare sulla concentrazione dei sali nutritivi rilevata nel Mare Adriatico durante la crociera del 1955 (Preliminary note on the concentration of nutritive salts found in the Adriatic Sea during the 1955 cruise). *It En*

CR 60-3722.

Meng-Chierogo, N. & D. Bregant (1961) M
8-02097
In 8-02091

Analisi chimica e spettrografica preliminare di un campione di fondo dell'Adriatico Centrale (Preliminary chemical and spectrographical analysis of a bottom core from the central Adriatic Sea). *It En*

CR 60-3723.

Mosetti, F. (1961) M
8-02098
In 8-02091

Lo stato attuale delle conoscenze sulle maree dell'Adriatico (The present state of knowledge of the Adriatic tides). *It En*

CR 61-06377.

Woodward, D. (1962) M
8-02099
Unesco Courier, 15 (9) : 10-3
Danger! Oil-polluted seas

No 61-326me. Popular article on subject with reference to IMCC meeting.

Carruthers, J. N. (1962) M
8-02100
Civ. Engng, Lond., April: unpag. Repr., 3 p.
The easy measurement of bottom currents at modest depths

Describes "compass jelly-bottle" method for measuring ocean current speeds ranging from well below $\frac{1}{4}$ knot up to about 6 knots. Particular device described not usable beyond about 60 fathoms, but could be adapted.

Hunkins, K. et al. (1962) M
8-02101
J. geophys. Res., 67 (1) : 235-47
Geophysical studies of the Chukchi Cap, Arctic Ocean

Echo-sounding, seismic-reflection, and magnetic measurements made across Chukchi Cap from drifting station Charlie in 1959.

Mandelbaum, H. (1962) M
8-02102
J. geophys. Res., 67 (1) : 249-69
Variation of a rotary tidal current with moon age

Current at Amrum-Bank lightship in German Bay is analyzed during 24 equal intervals between a Greenwich moon transit at 00 h 00 m Greenwich time and the next Greenwich moon transit at that time.

- Reed, R. J. & W. J. Campbell** (1962) M
8-02103
J. geophys. Res., 67 (1) : 281-97
 The equilibrium drift of ice station Alpha

Problem of unaccelerated drift of an ice floe is solved by a treatment similar to Shuleikin's. Curves of drift angle, drift speed, and wind factor as functions of wind speed are computed for two different sets of parameters and compared with Shuleikin's curves for one of the sets. As test of theory, drift angles, drift speeds, and wind factors were plotted against wind speed for 107 periods between 1 Jul. 1957 and 31 Aug. 1958.

- Crews, A. & J. Futterman** (1962) M
8-02104
J. geophys. Res., 67 (1) : 299-306
 Geomagnetic micropulsations due to the motion of ocean waves

When sea waves move in magnetic field of the earth, electric currents are generated in water volume. These give rise to magnetic field which perturbs earth's field. For plane trochoidal waves, this perturbing field decays exponentially with altitude and lies in a vertical plane which is oriented in the direction of wave propagation. For north-south waves, sea state 5, and an altitude of 100 feet, the perturbation is of the order of 01 gamma.

- Raff, A. D.** (1962) M
8-02105
J. geophys. Res., 67 (1) : 417-8
 Further magnetic measurements along the Murray fault

Measuring displacement across several oceanic strike-slip faults in north-eastern Pacific.

- Gerard, R., M. G. Langseth, Jr. & M. Ewing** (1962) M
8-02106
J. geophys. Res., 67 (2) : 785-803
 Thermal gradient measurements in the water and bottom sediment of the western Atlantic

New instrument called a thermograd, is described. Attached to piston coring device it measures temperatures simultaneously at three or more depths in the sediment while obtaining a core for later thermal conductivity measurement. Thermistor needle probes used to achieve thermal equilibrium with sediment in about one minute after penetration. *In situ* calibration of sensors is achieved by recording temperature in deep ocean waters. Nearly continuous water temperature measurements are shown for 15 stations extending from about 2000 meters deep to the ocean bottom.

- Fitzgerald, B. W., J. S. Rankin & D. M. Skauen** (1962) MF
8-02107
Science, 135 (3507) : 926
 Zinc-65 levels in oysters in the Thames River (Connecticut)

Determines levels of Zn for a 12-month period and states that none of the samples assayed show sufficient radioactivity to represent a health hazard.

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- Timmermans, J. A.** (1962) MF
8-02108
Trav. Sta. Rech. Groenendaal, D (34) : 35 p.
Estimation des dommages piscicoles causés par les pollutions (Estimation of damages to fisheries caused by pollution). *Fr Ne*
- Interstate Commission on the Potomac River Basin** (1961)* MF
8-02109
Washington D.C.
Water management in the Potomac estuary
- Hargis, W. J., Jr.** (1961) MF
8-02110
In 8-02109 : 38-44
Research on the tidal Potomac
- Historical review and general essay, and reference to current work on physical hydrography, models of the basin, plankton and benthos studies, especially in relation to "red-tide", production, pesticides, pollutants.
- Hargis, W. J., Jr.** (1962) MF
8-02111
Contr. Va Fish. Lab., 1960-61 (107)
Research on the tidal Potomac
- CR 8-02110.
- Haven, D.** (1961) MF
8-02112
In 8-02109 : 48-50
Eurasian water milfoil in the Chesapeake Bay and the Potomac River
- Haven, D.** (1962) MF
8-02113
Contr. Va Fish. Lab., 1960-61 (108)
Eurasian water milfoil in the Chesapeake Bay and the Potomac River
- CR 8-02112.
- Buczowska, Z., B. Nowicka & Z. Kubanek** (1961) MF
8-02114
Bull. Inst. mar. trop. Med. Gdansk, 12 : 177-86
Evaluation of enterococci as indicator of coastal water pollution
- WPA 35 (7) 1294. Studies carried out with sewage polluted water from the Gulf of Gdansk, Poland.
- Butler, P. A.** (1961) MF
8-02115
Proc. Gulf Caribb. Fish. Inst., 13 (1960) : 168-72
Effects of pesticides on commercial fisheries
- Considers possible harmful effects of use of pesticides in inland and estuarine waters.

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Gryson, A. (1960)

MF
8-02116

Arch. belges Méd. soc., (1) : 8 p.

Ostréiculture et hygiène publique (Oyster culture and public health).
No

Short review of sanitation problems with relation to mollusc consumption, with particular reference to the present situation in Belgium.

Audouin, J. (1962)

MF
8-02117

Rev. Trav. Inst. Pêches marit., 26 (1) : 5-104

Hydrologie de l'étang de Thau (Hydrology of the Thau Lagoon)

Geography, geology, climate, tides, currents, temperature and salinity.

Anadón, E., F. Saiz & M. López-Benito (1961)

MF
8-02118

Invest. pesq., (20) : 83-130

Estudio hidrográfico de la Ría de Vigo—3 parte (Hydrographic study of the Ría de Vigo—Part 3.). En

The isohaline and isotherm line distributions during an annual cycle are studied, some of them being selected as typical distribution patterns. All distributions have been related with the pluviometrical regime and river's shedding.

Schelske, C. L. & E. P. Odum (1962)

MF
8-02119

Proc. Gulf Caribb. Fish Inst., 14 (1961): 75-80

Mechanisms maintaining high productivity in Georgia estuaries

WHO (1962)

MF
8-02120

Publ. Hlth Pap., (13) : 115 p.

Aspects of water pollution control—A selection of papers prepared for the Conference on Water Pollution Problems in Europe, Geneva, 1961

Do 60-213me. Contains 8-02121 to 8-02124, 8-02039, 8-02558, 8-02044.

Nagibina, T. (1962)

MF
8-02121

Publ. Hlth Pap., (13) : 21-38

Water pollution control in the USSR and eastern European countries

CR 62-02894.

Manner, E. J. (1962)

MF
8-02122

Publ. Hlth Pap., (13) : 53-73

Water pollution in international law

CR 62-03417.

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Christ, W. (1962) MF
Publ. Hlth Pap., (13) : 87-99 8-02123
 Assessment of economic damage caused by water pollution
 CR 62-03016.

McNaughton, G. (1962) MF
Publ. Hlth Pap., (13) : 101-15 8-02124
 The financial and economic aspects of water pollution prevention
 CR 62-03015.

Chew, F., K. L. Drennan & W. J. Demoran (1962) MF
J. geophysics. Res., 67 (1) : 271-9 8-02125
 On the temperature field east of the Mississippi Delta

In winter 1960-61, surface temperature fronts of magnitude of 10°F change in two to three miles were common in the area east of the Mississippi Delta.

Anon. (1962) F
New Scient., 14 (284) : 163 8-02126
 Reporting levels from an isolated lake—Canada

Radio telemetering offers possibility of eliminating all visible connection between location and central point. Application of system has been developed for use at remote lakes in northern Ontario, where it was essential to have an accurate indication of water levels so that the best use could be made of the available water for hydroelectric power generation.

Shukla, R. N. & S. B. Kulkarni (1962) F
J. sci. industr. Res., 21B (6) : 276-7 8-02127
 The effect of wind speed on water evaporation reduction by the monolayers of alkoxy ethanols and *n*-alkyl alcohols

Tests efficacy of the monolayers of alkoxy ethanols and the corresponding *n*-alkyl alcohols as water evaporation retardants in the wind speed region of 1-13 miles/hr in a wind tunnel.

Anon. (1962) F
New Scient., 15 (294) : 28 8-02128
 Science in overseas industry—United States. Photographing pollution

In its fight against river pollution the USPHS now uses aerial photography. In Kansas City infra-red photography at night disclosed offenders.

Garofano, M. & G. Romagnoli (1961)* F
Riv. ital. Igiene, 21 : 274-82 8-02129
 (Research on discharge of sewage waters of Novara). *It*

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Goldman, C. R. & D. T. Mason (1962)
Science, 136 (3521) : 1049-50

F
 8-02130

Inorganic precipitation of carbon in productivity experiments utilizing carbon-14.

In series of experiments where iron was added to natural waters and photosynthesis was measured by the radiocarbon method, found that precipitation of carbon-14, presumably by mechanisms of occlusive co-precipitation, resulted. Low levels of iron and prefiltered controls are suggested as correction measures.

Litvinov, N. (1962)
Bull. World Hlth Org., 26 (4) : 439-63

F
 8-02131

Water pollution in the USSR and in other eastern European countries

Do 60-213me. Condition of water bodies and measures taken to prevent their pollution in the USSR, Czechoslovakia, Poland, Bulgaria and Romania are the main subjects. For each country information is given on population and area, physical features, rainfall and rivers, the distribution of population and industry, water supply and sewerage, the condition of surface and ground waters, the authorities and legislation concerned with the protection of water resources, and research on pollution. Author draws attention to experience gained in setting up special state bodies to take charge of water resources and in classifying rivers according to the uses to which they are put, a factor which determines the regulations governing the discharge of effluent into them. A plea is also made for the convening of specialized international conferences on problems connected with the protection of European water resources from pollution.

Key, A. (1962)
Bull. World Hlth Org., 26 (4) : 537-42

F
 8-02132

Water pollution in Europe: some recent information

Ci 1956 Key, A. and 8-02131. Note to bring up to date two reports on surface water pollution and ground water pollution in Europe, compiled in 1953 and 1955 respectively. Countries considered were those of western Europe.

Šulcek, Z., J. Doležal & J. Michal (1961)
Coll. Trav. chim. Tchécosl., 26 : 246-54

F
 8-02133

Rapid analytical methods for the investigation of metals and inorganic raw materials—12. Determination of traces of beryllium in mineral waters and mineralogical materials

WPA 35 (7) 1308.

- Faidyah, E. V.** (1961) F
8-02134
Gig. i Sanit., 26 : 10-6
 (New data for substantiating the maximum permissible concentration of hexavalent chromium in water basins). *Ru En*

WPA 35 (7) 1310. Adequacy of concentration accepted by State Sanitary Inspection of USSR confirmed by tests.

- Valach, R.** (1961) F
8-02135
Talanta, 8 : 443-4

Determination of fluoride in mineral waters with zirconium-xyleneol orange

WPA 35 (7) 1312. Method developed for rapid determination in waters containing relatively large amounts of phosphate, sulphate, aluminium, ferric iron.

- Dinsel, D. L. & T. R. Sweet** (1961) F
8-02136
Analyt. Chem., 33 : 1078-80

Spectrophotometric determination of iron with N,N-bis(carboxymethyl)-anthranilic acid

WPA 35 (7) 1315.

- Lewis, D. G.** (1961) F
8-02137
Analyt. Chem., 33 : 1127-8

Colorimetric determination of nitrate with 3,4-xyleneol

WPA 35 (7) 1317.

- Ceausescu, D.** (1960) F
8-02138
Zh. anal. Khim., 15 : 646-8

(Titrimetric determination of nitrates in water). *Ru*

WPA 35 (7) 1318.

- Burdon, E. H. W. J.** (1961) F
8-02139
Analyst, Camb., 86 : 429-33

The toxicology of nitrates and nitrites with particular reference to the potability of water supplies. A review

WPA 35 (7) 1319.

- Wright, J. M. & W. T. Lindsay** (1959) F
8-02140
Proc. Amer. Pwr Conf., 21 : 706-21

A new method for the continuous analysis of dissolved oxygen in water

WPA 35 (7) 1322. Test and prototype units based on reaction with thallium discussed and results compared with those obtained using Winkler method.

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Lo, B. K. (1960) F
8-02141
Chem. Weekbl., 56 : 732-3

Micro-determination of dissolved oxygen in water according to a modified Winkler method

WPA 35 (7) 1323. Recommended that titration be carried out with exclusion of air.

Fischer, W. K. (1961) F
8-02142
Fette-Seif.-Anstrichmitt., 63 : 14-23

Methods for the determination of small amounts of anionic surface-active materials in water effluents

WPA 35 (7) 1325. Critical review and discussion. Author reports Longwell & Maniece method is most suitable for adoption as standard.

Selyankina, K. P. (1961) F
8-02143
Gig. i Sanit., 26 (10) : 6-12

(Data for determining the maximum permissible concentration of vanadium in reservoirs). *Ru En*

WPA 35 (7) 1326. Results given in tables and discussed.

Anon. (1962) F
8-02144
Chem. Engng News, 40 (5) Pt. 1 : 52-3

Monitor detects fallout contamination

WPA 35 (7) 1327. Instrument developed by General Measurements of Garnerville, N.Y., for the continuous measurement of low levels of radioactivity in flowing liquids and for detection of the isotopes present.

Wade, W. O. & M. B. Hawkins (1961) F
8-02145
Univ. Calif., Inst. Engng Res., 28 p.

Procedures for the estimation of the concentration of nuclear weapon fallout in river water

WPA 35 (7) 1328. Authors describe, with examples, simple direct method for estimating, for a river-water supply, the concentration of fallout material arriving at the intake; use is made of stream data obtained from the Surface Water Branch of the US Geological Survey.

Cooke, A. H. (1960) F
8-02146
Proc. Soc. Wat. Treatm., 9 : 172-99

Monitoring of radioactivity in fresh water

WPA 35 (7) 1329. Since 1948 waste waters from AERE have been discharged to Thames, and analyses made by London Metropolitan Water Board. Reviews development of methods of analysis, preparation of samples, and design of apparatus and indicates new techniques being developed.

- Běhounek, F. & V. Zelenková** (1960) F
8-02147
Jadorná Energie, 6 : 299-302
 Determination of β -activity of liquid wastes

WPA 35 (7) 1330. Accuracy of conventional method with an end-window Geiger-Müller tube increased by using double filtration.

- Yamagata, N., T. Hanya & S. Nagayama** (1961) F
8-02148
 Tokyo, Inst. Publ. Hlth, Rad. Hlth Lab., 8 p.
 The concentrations of Sr-90 and Cs-137 in land waters in Japan

WPA 35 (7) 1331. Data tabulated.

- Linford, A. E. & F. N. Spon Ltd.** (1961) F
8-02149
 London, 462 p.
 Flow measurement and meters

WPA 35 (7) 1337. NE 1949 Linford, A. E. & F. N. Spon Ltd. (?). Second revised edition of book on design and operation of various types of meters. Scope widened to cover differential pressure meters, ultrasonic flow meters, and flow summation.

- Anon.** (1961) F
8-02150
Wat. & Wat. Engng, 65 : 97-103
 Evaporation control—further information on the application of monolayers for the reduction of evaporation losses from water surfaces

WPA 35 (7) 1342.

- Molt, E. L. & L. H. Tio** (1960) F
8-02151
Chem. Weekbl., 56 : 553-7
 Photo-electric determination of the turbidity of water

WPA 35 (7) 1343.

- Orlitz, A. & J. Svec** (1959) F
8-02152
Kozarstvi, 9 : 263-5, 293-5
 Tannery effluents from the biological point of view

WPA 35 (7) 1402. Toxicity of sodium sulphide was specific; maximum permissible concentrations for *Daphnia magna*, carp, and *Gambusia affinis*. Syntants are more toxic; threshold concentration for *Lebistes reticulatus*.

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Anon. (1961)

F
8-02153

J. Amer. Wat. Wks Ass., 53 : 851-61

Government functions in pollution control. Joint discussion

WPA 35 (7) 1414. Discussion on role of US government agencies. McCallum, G. E.—work of federal agencies, incl. relevant legislation—, & Nelle, R. S.—the duties, responsibilities and action of state stream pollution control board. Special consideration to work in Illinois.

Boehme, E. (1960)

F
8-02154

Ber. Abwassertech. Ver., (12) : 256-69

Protection of waters in new legislation

WPA 35 (7) 1415. Survey of applications of new water law to protection of surface and ground waters in Germany. Deals with regional variations, control of use of water, prevention of pollution and of undesirable alterations in the condition of waters.

Kirdorf (1960)

F
8-02155

Ber. Abwassertech. Ver., (12) : 380-9

Protection of waters in the new water law

WPA 35 (7) 1416. Discusses provisions of water law of 1960 which apply to protection of waters, and describes district legislation in Hesse, Saarland, and the Rhine Palatinate.

Leichnitz, W. (1960)

F
8-02156

Ber. Abwassertech. Ver., (12) : 363-79

Waste water problems on the Nahe

WPA 35 (7) 1417. Description of course of a tributary, 120 km long, which enters the Rhine at Bingen. Deals with individual sources of pollution and with methods in use or proposed for reducing their effect. Increasing importance of oil pollution and of pollution by weedkillers is discussed.

Cross, B. (1962)

F
8-02157

Chem. Engng., 69 (7) : 42-3

Aerial photos: a new weapon against pollution

WPA 35 (7) 1419. Aerial photography, using colour films and an infra-red camera, tested by USPHS as a method of detecting pollution by coloured and heated effluents.

Sowards, C. L. (1961)

F
8-02158

Washington, D.C., mimeo, 33 p.

Safety as related to the use of chemicals and electricity in fishery management

Lists many chemicals used as piscicides, herbicides, insecticides, rodenticides and their toxicities, lethal doses and antidotes. Also good safety rules and practices.

- Huet, M.** (1962) F
8-02159
Bull. Féd. europ. Prot. Eaux, (6) : 3-11
 Qualités des eaux à exiger pour le poisson (Water qualities required for fish)

Review of this subject with special reference to temperate waters.

- Geal, L.** (1961)* F
8-02160
Hidrol. Közl., 41 (3) : 266-8
 (Radioactive pollution of Hungary's surface waters). *Ma*

- Geal, L.** (1961)* F
8-02161
 Washington, D.C., 8 p.
 Radioactive pollution of Hungary's surface waters

En 8-02160. Available from the Office of Technical Services, Washington, D.C.

- Rodier, J. et al.** (1961) F
8-02162
Rapp. Cent. Étud. nucl. Saclay, (2003) : 54 p.
 Dilution of radioactive waste in the Rhône

Chemical and radiochemical analyses of liquid waste at Marcoule and of Rhône water above and below discharge point have permitted calculation of total discharge and of its dilution in the river during 1960.

- Hoak, R. D.** (1961) F
8-02163
J. Wat. Poll. Contr. Fed., 33 : 1267-76
 Thermal pollution problem

Affects mainly domestic supplies and also fisheries where the dissolved O₂ content is important. Limitation proposed by Aquatic Life Advisory Committee of the Ohio River Valley Water Sanitation Commission. The effect of air temperature on water temperature is described with some examples.

- Davies, J. T.** (1962) F
8-02164
Chem. & Ind., 1962 : 906-10
 Some effects of surface-active agents on waves and ripples

Published work on damping of induced ripples is reviewed and latest research described, incl. discussion of alterations in hydrodynamic conditions near surface of a wind-blown lake in the presence of a monomolecular "slick" of hexadecanol.

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Mullins, J. W. et al. (1961)

F
8-02165

J. Amer. Wat. Wks Ass., 53 : 1466-72

Evaluation of method for counting gross radioactivity in water

Water containing a radionuclide was distributed to several agencies for counting. Half the laboratories returned the gross radioactivity within 10-15% of the true value.

Woods, D. E. (1961)

F
8-02166

Fish. Ser. Minn. Dep. Conserv., (3) : 51-60

The effect of compressed air on winter oxygen levels in a fertile southern Minnesota lake

SFA 7 (2) 4905. Removal of portion of ice cover with compressed air proved to be an unsuccessful means of maintaining adequate winter dissolved oxygen levels in a small lake.

Adams, R. D. & D. A. Christoffel (1962)

M
8-02167

J. geophys. Res., 67 (2) : 805-13

Total magnetic field surveys between New Zealand and the Ross Sea

During summers 1958-59 and 1959-60, surveys made with ship-towed nuclear spin magnetometers. Total field contours are given for region between New Zealand and 70° S and for the Ross Sea area. Magnetic anomalies in different bathymetric regions are discussed and interpretations given.

Dupree, H. K. (1960)

F
8-02168

Proc. Conf. stheast. Ass. Game Commrs, 14 : 132-7

The arsenic content of water plankton, soil and fish from ponds treated with sodium arsenite for weed control

SFA 7 (2) 4920. Analyses were made of over 1,000 samples of water, plankton, soil and fish from a 22-acre, a 26-acre, and eight 0.25-acre earthen ponds that were treated with different amounts of sodium arsenite.

Douglas, N. H. (1960)

F
8-02169

Proc. Conf. stheast. Ass. Game Commrs, 14 : 215-22

A study of the comparative use of different species of fish in the toxicity bioassay of petroleum refinery effluent

SFA 7 (2) 4928. Presents comparison of 4 spp. as test animals.

Ryhänen, R. (1961)

F
8-02170

Ann. zool. Soc. Vanamo, 22 (8) : 70 p.

Über die Einwirkung von Grubenabfällen auf einen dystrophen See (On the influence of wastes from mines on dystrophic lakes). Su

General survey of problem, with special reference to conditions in Finland and Scandinavia.

PLANKTON

PLANKTON

- Trégouboff, G.** (1962) M
8-02171
Bull. Inst. océanogr. Monaco, (1226): 14 p.
 Prospection biologique sous-marine dans la région de Villefranche-sur-Mer en janvier 1961 (Underwater biological prospection in the region of Villefranche-sur-Mer in January 1961). En

Account is given of visual biological, and, to some extent, ecological observations made during the two recent dives of the bathyscaph F.N.R.S. III. Observations of microplankton and temperature curve.

- Patten, B. C.** (1962) M
8-02172
Contr. Va Fish. Lab., 1960-61 (92)
 Negentropy flow in communities of plankton
 CR 61-11646.

- Patten, B. C.** (1962) M
8-02173
Contr. Va Fish. Lab., 1960-61 (93)
 Plankton energetics of Raritan Bay
 CR 62-04689.

- Occhipinti, A. G., A. Magliocca & C. Teixeira** (1961) M
8-02174
Bol. Inst. oceanogr. S. Paulo, 11 (3) : 18-39
 Diurnal variation of phytoplankton production and solar radiation in coastal waters off Cananéia. Es
 First estimate of primary productivity of the Cananeia region, São Paulo, Brazil.

- Teixeira, C. & M. B. Kutner** (1961) M
8-02175
Bol. Inst. oceanogr. S. Paulo, 11 (3) : 41-73
 Contribuição para o conhecimento das diatomáceas da região de Cananéia (Contribution to the knowledge of the diatoms of the Cananeia region). En

A list of diatoms found in the region of Cananeia is given. Description of the diatoms recorded for the first time in Brazilian waters.

- Narchi, W.** (1961) M
8-02176
Bol. Inst. oceanogr. S. Paulo, 11 (3) : 75-7
Dentostomina besnardii, nova espécie de foraminífero (*Dentostomina besnardii*, new species of Foraminifera). En

Description of the sp. from Banco de São Tomé—lat. 22° 08' S—long. 40° 39' W—and Trindade—lat. 20° 33' S—long. 29° 22' W—, coast of Brazil.

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Vives, F. & F. Fraga (1961)

M

Invest. pesq., (19) : 17-36

8-02177

Florística y sucesión del fitoplancton en la Ría de Vigo (Flora and succession of phytoplankton in the Ría de Vigo). En

Results of the floristic analysis of the phytoplanktonic samples taken in two points of Ría de Vigo in the season 1958 and 59 are shown; and the seasonal distribution of the more typical spp. is given.

Margalef, R. (1961)

M

Invest. pesq., (19) : 81-101

8-02178

Distribución ecológica y geográfica de las especies del fitoplancton marino (Ecological and geographical distribution of the species of marine phytoplankton). En

An attempt to determine ecological and geographical meaning of spp. for the purpose of using them as biological indicators in routine work in relation with hydrography and fisheries.

Vives, F. & F. Fraga (1961)

M

Invest. pesq., (19) : 129-37

8-02179

Producción básica en la Ría de Vigo (NW de España) (Basic production in the Ría de Vigo, NW of Spain). En

Basic production of the sea water of Ría de Vigo, has been calculated on the basis of some samples during the season from Mar. 1958 to Feb. 1959. Cellular volumes of the phytoplanktonic organisms and their plant pigments content have been used in the computation.

Godeaux, J. (1962)

M

Résult. sci. Expéd. océanogr. belge Atlant. Sud, 3 (7) : 32 p.

8-02180

Tuniciers pélagiques (Pelagic tunicates)

Fraga, F. & F. Vives (1961)

M

Invest. pesq., (20) : 65-71

8-02181

Variación estacional de la materia orgánica en la Ría de Vigo (Seasonal variation of the organic matter in the Ría de Vigo). En

The equation relating the organic nitrogen production with the solar energy on the sea surface and the sea temperature is verified in two hydrographic stations.

Margalef, R. (1961)

M

Invest. pesq., (20) : 131-43

8-02182

Fitoplancton atlántico de las costas de Mauritania y Senegal (Atlantic phytoplankton of the coasts of Mauritania and Senegal). En

Study of a small number of samples of surface plankton with comments on some spp. of interest.

PLANKTON

Bernard, F. (1961)

M
8-02183

Ann. Inst. océanogr., Paris, 39 (5) : 61-160

Campagne 1955 en Méditerranée nord-orientale (suite)—3. Problèmes de fertilité élémentaire en Méditerranée de 0 à 3 000 mètres de profondeur. Campagne de la 'Calypso' (juillet 1955) (Campaign 1955 in the north eastern Mediterranean—continuation—3. Problems of basic productivity in the Mediterranean, from 0 to 3,000 meters depth—'Calypso' campaign July 1955). En

Compares SW and SE basins of Mediterranean. Describes behaviour of the prevailing organisms—flagellates—, influence of suspended sand. Compares with other seas.

Howell-Rivero, L. (1962)

M
8-02184

Unesco Courier, 15 (9) : 14-6

The ocean under a microscope

Popular article about marine plankton.

Cassie, R. M. (1962)

MF
8-02185

J. Anim. Ecol., 31 (1) : 65-92

Frequency distribution models in the ecology of plankton and other organisms

Mathematical frequency-distribution models for the distribution of organisms in space are discussed with particular reference to plankton ecology. Appropriate models for random distribution and underdispersion are respectively the Poisson series and the binomial series. A model, the "Poisson-log-normal" distribution, is proposed, in which the means of a continuous series of Poisson variates are distributed as a log-normal. This has the required degree of skewness and appears to estimate zero counts without bias. A method is shown for separating the parameters of different populations from a polymodal distribution, using log-probability paper.

Brawerman, G. (1962)

F
8-02186

Biochim. biophys. Acta, 61 (2) : 313-5

A specific species of ribosomes associated with the chloroplasts of *Euglena gracilis*

Meijering, M. P. D. & J. B. Redfern (1962)

F
8-02187

Amer. Nat., 96 (886) : 61-4

Heart-beats as a measure of biotic time in the life of Daphniidae

Patten, B. C. (1962)

FG
8-02188

Contr. Va Fish. Lab., 1960-61 (94)

Preliminary method for estimating stability in plankton

CR 62-00146.

BENTHOS

M
8-02189**Bedrosian, P. H.** (1961)

Thesis, Univ. of Florida, 173 p.

Relationship of certain microscopic marine algae to Zn_{65}

DA 22 (9) : 3146. Study of radioactive decontamination capacity of *Gracilaria foliifera*, *Enteromorpha prolifera* and *Sphacelaria* sp. subjected to various controlled conditions of light and temperature in uptake experiments.

M
8-02190**Schmitz, E. H.** (1961)

Thesis, Univ. of Colorado, 179 p.

Visceral anatomy of *Gammarus lacustris lacustris* Sars (Crustacea: Amphipoda)

DA 22 (9) : 3310.

M
8-02191**Brafield, A. E.** (1961)*Anim. Behav.*, 9 (3-4) : 234-5

Orientated movements of marine molluscs

Abstr. only. Do 61-046me.

M
8-02192**Baltus, E.** (1962)*Biochim. biophys. Acta*, 5 (1-2) : 82-7

Étude de la ribonucléase des nucléoles isolés à partir d'oocytes d'astéries (*Asterias rubens*) (Study of ribonuclease of nucleoli isolated from starfish oocytes, *Asterias rubens*). En

M
8-02193**Greuet, C.** (1962)*Bull. Inst. océanogr. Monaco*, (1227) : 4 p.

L'involution antérieure chez *Hydroides norvegica* (Gunnerus) (Annélide polychète) (The anterior involution in *Hydroides norvegica* (Gunnerus), polychaete annelid). En

Embryology studied in culture of starved animal.

M
8-02194**Squires, H. J.** (1962)*Bull. Fish. Res. Bd Can.*, (135) : 29 p.

Giant scallops in Newfoundland coastal waters

Exploratory fishing in summers of 1957 and 1958 showed several fairly large beds of giant scallops, *Placopecten magellanicus* Gmelin, on the Newfoundland west coast, smaller and fewer beds on the southwest coast. Gives sizes and ages. Reviews history of fishery. The most northerly N. American record of capture was made at northeast entrance to Pistolet Bay. Iceland scallops, *Chlamys islandicus* Müller, were taken incidentally during this survey, in generally deeper and colder water.

- M
8-02195
- Bargmann, W., M. von Harnack & K. Jacob** (1962)*
Z. Zellforsch., 56 : 573-94
 (On the fine structure of the nervous system of the starfish (*Asterias rubens* L.). 1. A contribution to the comparative morphology of the ganglia).
De

- M
8-02196
- Li, C. P., B. Prescott & W. G. Jahnes** (1962)*
Proc. Soc. exp. Biol., N.Y., 109 : 534-8
 Antiviral activity of a fraction of abalone juice

- M
8-02197
- Parsons, T. R. & J. D. H. Strickland** (1962)
Science, 136 (3513) : 313-4
 Oceanic detritus

Measures the quantity and chemical composition of oceanic detritus in the northeastern Pacific Ocean. Results indicate that oceanic detritus must be considered as a source of food for secondary producers.

- M
8-02198
- Hargis, W. J., Jr. & C. L. MacKenzie, Jr.** (1961)
Nautilus, 75 (1) : 7-16
 Sexual behavior of the oyster drills: *Eupleura caudata* and *Urosalpinx cinerea*

Observations reported are part of extensive study of the biology. Deals with copulatory behaviour, sperm viability and storage.

- M
8-02199
- Hargis, W. J., Jr. & C. L. MacKenzie, Jr.** (1962)
Contr. Va Fish. Lab., 1960-61 (100)
 Sexual behavior of the oyster drills: *Eupleura caudata* and *Urosalpinx cinerea*

CR 8-02198.

- M
8-02200
- Lane, C. E.** (n.d. 1962)
 [Publ.] *Mar. Lab. Univ. Miami*, (62-2) : 10 p.
 The general biology of *Teredo*

Narrative account of principal findings on the biology of *Teredo* and of their significance.

- M
8-02201
- Kutner, M. B.** (1961)
Bol. Inst. oceanogr. S. Paulo, 11 (3) : 3-15
 Algumas diatomáceas encontradas sobre algas superiores (Some diatoms found on higher algae). En

A list of diatoms found on the higher algae *Centroceras* sp., collected at Itanhaém, State of S. Paulo, Brazil, and *Ectocarpus* sp. and *Caulerpa racemosa* from Ubatuba, also in the State of S. Paulo, is given in this paper. 9 different spp. and the genus *Auricula*, are recorded. A new sp. *Navicula merchersi* is described.

Zariquiey Alvarez, R. (1961)

M
8-02202

Invest. pesq., (19) : 103-10

Decápodos españoles—15. Sobre un raro crustáceo decápodo: *Albunea carabus* (Linneo 1758) (Spanish decapods—15. On a rare crustacean decapod *Albunea carabus* (Linnaeus 1758)). En

Record of occurrence on the shore of Castellón, eastern Spain. The only known records on the Spanish coast were in Minorca and Málaga. Morphological characters of the specimens are described and ill.

Cornwall, I. E. (1962)

M
8-02203

Canad. J. Zool., 40 (4) : 621-9

The identification of barnacles, with further figures and notes

The identification of fossil and recent sessile barnacles by the figure in the shell and the tracing of ancient spp. through fossil remains is discussed and several examples of this are shown. A reason for the formation of the figures is discussed.

Tattersall, O. S. (1962)

M
8-02204

Proc. zool. Soc., Lond., 139 (2) : 221-47

Report on a collection of Mysidacea from South African off-shore and coastal waters (1957-59) and from Zanzibar (1961)

List of spp. in collection is given. *Anchialina typica* (Kröyer) and *Euchaetomera typica* G. O. Sars, are new records for region; *Siriella pondoensis* and *Mysidopsis eremita* are new to science and are described and figured. 3 rare spp. of *Heteromysis*, commensal with spp. of hermit crabs, in association with an ophiuroid and within central cavity of sponge are recorded from Zanzibar. Additional notes, with figures, are given of morphology and ecology, the distribution of genus discussed and a key for the identification of spp. given.

Lang, K. (1961)

M
8-02205

Ark. Zool., 13 (6) : 493-510

Contributions to the knowledge of the genus *Microcerberus* Karaman (Crustacea Isopoda) with a description of a new species from the central Californian coast

Taxonomic description of *M. abbotti* n. sp.

Åkesson, B. (1961)

M
8-02206

Ark. Zool., 13 (6) : 511-31

The development of *Golfingia elongata* Keferstein (Sipunculidea) with some remarks on the development of neurosecretory cells in sipunculids

New observations about the development of the sp. collected in Roscoff, France.

- M
8-02207
- Boaden, P. J. S.** (1961)
Ark. Zool., 13 (6) : 553-9

MEGANERILLA swedmarki nov. gen. nov. spec., an archiannelid of the family Nerillidae

Taxonomic description, systematics, habitat and behaviour of spp. of west Sweden.

- M
8-02208
- Immers, J.** (1961)
Ark. Zool., 13 (6) : 561-4
- Incorporation of $^{35}\text{SO}_4$ in the sea urchin egg and larva

Quantitative results on $^{35}\text{SO}_4$ incorporation in different stages of development of *Paracentrotus lividus*.

- M
8-02209
- Runnström, J.** (1961)
Ark. Zool., 13 (6) : 565-71

The mechanism of protection of the egg against polyspermy—Experiments on the sea urchin *Paracentrotus lividus*

- M
8-02210
- Lang, K.** (1961)
Ark. Zool., 13 (6) : 573-7
- Further notes on *Pancolus californiensis* Richardson

Supplementary description of the mouth parts.

- M
8-02211
- Barnard, J. L.** (1962)
Pacif. Nat., 3 (1) : 1-72

Benthic marine Amphipoda of southern California: families Aoridae, Photidae, Ischyroceridae, Corophiidae, Podoceridae

Keys to identification of genera and spp., and their diagnosis and relationships; notes on their ecology.

- M
8-02212
- Barnard, J. L.** (1962)
Pacif. Nat., 3 (2) : 73-115
- Benthic marine Amphipoda of southern California: families Tironidae to Gammaridae

Co 8-02211.

- M
8-02213
- Barnard, J. L.** (1962)
Pacif. Nat., 3 (3) : 116-63
- Benthic marine Amphipoda of southern California: families Amphilochidae, Leucothoidae, Stenothoidae, Argissidae, Hyalidae

Co 8-02212.

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Jolley, W. B. et al. (1962)
J. Endocrin., 25 (2) : 183-8

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 8-02214

Effect of oestradiol-17B on cleavage, nucleic acid metabolism and protein synthesis in sea urchin, *Strongylocentrotus purpuratus*, embryos

Jones, W. E. (1962)
Field Stud., 1 (4) : 1-32

M
 8-02215

A key to the genera of the British seaweeds

Ci 60-3917. Key developed from one used on courses at Marine Biology Station, Menai Bridge and at Dale Fort Field Centre. Based on key in Knight & Parke's "Manx Algae" (1931), modified by inclusion of genera not found on the Isle of Man and by addition of a key to the Cyanophyceae. Key further modified in light of experience gained during courses and expanded to incl. all genera in Parke's "Check List" (1953) and the later amendments—Parke 1956, -57, -59—, apart from a few minor exceptions and with the major change that the classification of Drouet & Daily (1956) has been adopted for the non-filamentous Cyanophyceae. Term "seaweeds" used in a limited sense of four classes in Newton's "Handbook" (1931)—Chlorophyceae, Phaeophyceae, Rhodophyceae and Cyanophyceae—the motile Chlorophyceae (Volvocales) are omitted.

Ryland, J. S. (1962)
Field Stud., 1 (4) : 33-51

M
 8-02216

Biology and identification of intertidal Polyzoa

General review of biology—structure, classification, feeding, regeneration, life-cycle, preservation, identification—; key to British spp., check list and selected bibliography.

Lévi, C. (1961)
Ann. Inst. océanogr., Paris, 39 (5) : 3-32

M
 8-02217

Campagne 1954 dans l'Océan Indien—Les spongiaires de l'île Aldabra (1954 cruise in the Indian Ocean—Sponges from Aldabra Island)

Identifies 42 spp., 8 of which are new to science.

Rossi, L. (1961)
Ann. Inst. océanogr., Paris, 39 (5) : 33-48

M
 8-02218

Études sur le seuil Siculo-Tunisien (suite). 6. Madréporaires. Campagne de la 'Calypso' (août-septembre 1954) (Studies on the Siculo-Tunisian ridge (continuation). 6. Madreporaria. Cruise of the 'Calypso', August-September 1954)

Describes 14 spp. and discusses systematic and biogeographic problems.

M

Bellan, G. (1961)

8-02219

Ann. Inst. océanogr., Paris, 39 (5) : 49-60

Campagne de la 'Calypso': seuil Siculo-Tunisien—7. Annélides polychètes. Campagne de la 'Calypso' (août-septembre 1954) (Campaign of the 'Calypso': Siculo-Tunisian ridge—7. Annelida Polychaeta. Campaign of the 'Calypso', August-September 1954)

50 spp. are identified and used as indicators for littoral formation.

M

Bellan, G. (1961)

8-02220

Ann. Inst. océanogr., Paris, 39 (5) : 161-78

Campagne de la 'Calypso': Méditerranée nord-orientale—4. Annélides polychètes—Campagne de la 'Calypso' (septembre-octobre 1955) ('Calypso' campaign: north-east Mediterranean—4. Annelida Polychaeta. Cruises of the 'Calypso', September-October 1955)

Identifies 54 spp. from eastern Mediterranean which are used as indicators for littoral zonation.

M

Stubbings, H. G. (1961)

8-02221

Ann. Inst. océanogr., Paris, 39 (5) : 179-92

Campagne de la 'Calypso' dans le golfe de Guinée et aux îles Principe, São Tomé, Annobon (1956) (suite)—11. Cirripedia ('Calypso' cruise in the Gulf of Guinea, and at Principe and São Tomé Islands—continuation—11. Cirripedia)

Report on 12 spp. and var. of Cirripedia, 3 spp. of barnacles, 8 of sessile forms, 1 acrothoracian. Systematic and biogeographic problems are discussed.

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Tixier-Durivault, A. (1961)

8-02222

Ann. Inst. océanogr., Paris, 39 (5) : 237-62

Campagne de la 'Calypso': golfe de Guinée—14. Les octocoralliaires du golfe de Guinée et des îles du Cap-Vert (Alcyonacea, Pennatulacea) (Campaign of the 'Calypso': Gulf of Guinea—14. Octocorallia from the Gulf of Guinea and Cape Verde Islands, Alcyonacea, Pennatulacea)

Co 8-02407. Describes 14 spp., 5 new to science—*Bellonella conspicua*, n.sp., *B. madseni* n.sp., *Gersemia subtilis* n.sp., *Eunephthya alba* n.sp., *Pteroeides morbosus* n.sp.

M

Costa, S. (1961)

8-02223

Ann. Inst. océanogr., Paris, 89 (5) : 269-75

Campagne de la 'Calypso' en mer d'Alboran et dans la baie Ibéro-Marocaine (1958) (suite) 3. Amphipodes (Campaign of the 'Calypso' in the Alboran Sea and in the Ibero-Moroccan Bay, 1958 (continuation). 3. Amphipoda)

Lists spp. collected with some systematic remarks.

M

MacNae, W. (1962)

8-02224

S. Afr. J. Sci., 58 (7) : 208-12

The fauna and flora of the eastern coasts of southern Africa in relation to ocean currents

Text of paper presented at Port Elizabeth congress of the S. African Association for the Advancement of Science. Charts of currents of SW Indian Ocean, and zoo-geographical considerations; reference mainly to worms, corals, fiddler crabs, mangrove fauna.

MF

Margalef, R. (1961)

8-02225

Invest. pesq., (19) : 111-8

Variaciones intraspecíficas de los pigmentos asimiladores en clorofíceas y fanerógamas acuáticas (Intraspecific variations of the assimilating pigments in aquatic Chlorophyceae and phanerogams). En

Gives a few data on pigment analysis of uni-algal culture of freshwater green algae and of benthic marine flowering plants, incl. data on freshwater spp. for the purposes of comparison. No turbid extracts were used and computations in terms of pigments were made.

MF

Mattisson, A. G. M. (1961)

8-02226

Ark. Zool., 13 (6) : 545-52

Flavins in some types of invertebrate muscles

Estimates of flavins in muscle tissues from invertebrates of different taxonomic groups and with marked differences in their oxidative metabolism.

MF

Tabb, D. C. (1962)

8-02227

Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 109-10

The ivory barnacle, *Balanus eburneus*, as a biological indicator in brackish waters of South Florida

Abstr. only.

MF

Velasquez, G. T. (1962)

8-02228

Philipp. J. Sci., 91 (3) : 267-380

The blue-green algae of the Philippines

Work incl. all known specimens of Myxophyceae in Philippines, which number 162 spp. and 3 forms belonging to 33 genera and 8 families. Most specimens re-examined deposited in the Cryptogamic Herbarium of the Chicago Natural History Museum since before World War 2. There is also incl. assemblage of materials mostly collected by former botanists who visited the Philippines, and deposited in the US National Museum, New York Botanical Garden, and Herbarium of the University of California.

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- Hoffman, L. R.** (1961)
Thesis, Univ. of Texas, 224 p.
Studies of the morphology, cytology and reproduction of *Oedogonium*
and *Oedocladium*

DA 22 (9) : 2956.

- F
8-02230
- Cooke, H. G.** (1962)
Thesis, Univ. of Wisconsin, 159 p.
The ecology, life-histories and systematics of the tendipedid (chironomid)
midges of the vicinity of Madison, Wisconsin

DA 22 (9) : 3302.

- F
8-02231
- Satir, P. G.** (1961)
Thesis, Rockefeller Inst., USA, 194 p.
The mechanism of ciliary motion; a correlation of morphological and physio-
logical aspects of ciliary beat of the gill epithelium of the freshwater mussel,
Elliptio complanatus (Solander)

DA 22 (9) : 3309.

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8-02232
- Hynes, H. B., T. R. Williams & W. E. Kershaw** (1961)*
Ann. trop. Med. Parasit., 55 : 197-201

Freshwater crabs and *Simulium neavei* in East Africa—1. Preliminary
observations made on the slopes of Mount Elgon in December 1961 and
January 1961

- F
8-02233
- Zabka, G. G. & W. R. Lazo** (1962)
Amer. J. Bot., 49 (2) : 146-8

Reciprocal transfer of materials between algal cells and myxomycete
plasmodia in intimate association

Pure cultures of *Fuligo cinerea*, a myxomycete, and *Chlorella xanthella*,
a green alga, were separately permitted to accumulate sodium radiophosphate
from an agar medium and come into full association with non-radioactive
cultures of the other organism.

- F
8-02234
- Machlis, L.** (1962)
Amer. J. Bot., 49 (2) : 171-77

The nutrition of certain species of the green alga *Oedogonium*

- F
8-02235
- Singh, R. N.** (1962)
Amer. J. Bot., 49 (2) : 188-91

A problematic filamentous saprophytic alga

Organism, having superficial resemblance to a water-mold, was found grow-
ing submerged in a narrow drain in a flat at Vishnu Bhavan, Lanka, Varanasi,
India, in 1945.

Anon. (1962)F
8-02236*New Scient.*, 14 (293) : 708

Science in overseas industry—United States. Keeping alligatorweed in check

In S. America, this aquatic plant is kept in check by insects that feed on it, but in southeastern parts of US, where the weed gained a foothold about 100 years ago, the plant has no local insect enemies. The result is that together with the water hyacinth, alligatorweed has become a major nuisance choking lakes and rivers, interfering with agriculture, fishing and recreation. Three insects appear to be promising as suppressors: a flea beetle, a stem borer and a sp. of thrips.

Best, J. B. & I. Rubinstein (1962)F
8-02237*Science*, 135 (3507) : 916-8

Environmental familiarity and feeding in a planarian

Observations on planarians which tend to delay feeding in environmental conditions to which they are not habituated.

Silvo, O. E. J. (1962)F
8-02238*Vesitulous*, 3 (1) : 16-7

The control of harmful aquatic plants

WPA 35 (7) 1432. Discusses methods. Experiments in Finland on control of *Potamogeton* sp. and *Elodea canadensis*, and blue-green algae.

Ferguson, F. F., C. S. Richards & J. R. Palmer (1961)F
8-02239*Publ. Hlth Rep., Wash.*, 76 : 461-8Control of *Australorbis glabratus* by acrolein in Puerto Rico

WPA 35 (7) 1433. Preliminary field and laboratory studies made during 1958-59 to test effectiveness of acrolein against *A. glabratus* in Puerto Rico described and results given in tables and discussed.

Wensler, R. J. D. & J. G. Rempel (1962)F
8-02240*Canad. J. Zool.*, 40 (2) : 199-229

The morphology of the male and female reproductive systems of the midge, *Chironomus plumosus* L.

Deals with anatomy and histology of the reproductive system of the sp.

Mookerjee, S. (1962)F
8-02241*Naturwissenschaften*, 49 (15) : 356-7Dual capacity of differentiation of the middle piece in *Hydra*

- Hopkins, C. L.** (1962) F
8-02242
Field Stud., 1 (4) : 53-72

The distribution of Hydracarina in the vicinity of Flatford Mill Field Centre, east Suffolk

During years 1959-61 series of collections made in lower part of Stour basin. From these brief account given of distribution of spp. over several habitats examined.

- Lenhoff, H. M. & J. Bovaird** (1961) F
8-02243
Developm. Biol., 3 : 227-40

Quantitative chemical approach to problems of nematocyst distribution and replacement in *Hydra*

IABS 24 (2) 4111.

- Aldrich, F. A.** (1961) F
8-02244
Proc. Acad. nat. Sci. Philad., 113 : 21-8

Seasonal variations in the benthic invertebrate fauna of the San Joaquin River estuary of California, with emphasis on the amphipod, *Corophium spinicorne* Stimpson

SFA 7 (2) 4855.

- Tebo, L. B., Jr. & W. W. Hassler** (1961) F
8-02245
J. Elisha Mitchell sci. Soc., 77 (2) : 249-59

Seasonal abundance of aquatic insects in western North Carolina trout streams

SFA 7 (2) 4866. Samples were collected over an eighteen-month period at three sampling stations on Shope and Ball Creeks, Coweeta Experimental Forest, Macon County.

- Passano, L. M. & C. B. McCullough** (1962) F
8-02246
Proc. nat. Acad. Sci., Wash., 48 (8) : 1376-82

The light response and the rhythmic potentials of *Hydra*

- Owens, M., N. S. Thom & G. E. Eden** (1961) F
8-02247
Proc. Soc. Wat. Treatm. Examin., 10 : 53-65

The uptake and release of radioactive strontium by freshwater plants

Details results of experiments with *Nasturtium officinale*—watercress—, common in English inland rivers into which the discharge of treated reactor waters might eventually be considered. Issued also as: *Repr. Wat. Poll. Res. Lab.*, (388).

FG
8-02248**Hopkins, B.** (1962)*New Phytol.*, 61 (2) : 221-3The measurement of available light by the use of *Chlorella*

Due to lack of a suitable instrument for measuring the 'photosynthetic efficiency'—or some similar value—of light, and due partly to the constantly changing light intensity found in natural conditions, it was decided to try to use *C. vulgaris* Beijerinck as a phytometer.

G
8-02249**Wardlaw, O. W.** (1962)*New Phytol.*, 61 (2) : 226-8

[Review]

Re 62-03454.

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8-02250**ICNAF** (1961)*Statist. Bull. int. Comm. Northw. Atlant. Fish.*, 9 (1959) : 70 p.

In two parts: development of fishery in the convention area; statistics for 1959 of landings of groundfish—round fresh weight—and effort, by spp., gears and sub-areas and countries; corrections and amendments to statistics published in earlier volumes are appended.

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8-02251**Germany. Federal Republic** (1961)*Seefisch. u. Fischvers.*, (1960) : 58 p.

Tables of production statistics by spp., months, regions, types of gear, and use of product; trade quantities and values; fishing effort; contains also a summary analysis and interpretation of the figures, with many diagrams.

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8-02252**FAO/UN** (1962)*Rep. FAO/EPTA*, (1518) : 48 p.

First report to the Government of Ceylon on fishing boat engineering—Based on the work of E. R. Kvaran

Report on FAO project carried out under UN Expanded Programme of Technical Assistance. Reviews government facilities; deals with mechanization of existing craft and introduction of new types, and training of personnel. Gives recommendations for further action.

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8-02253**Gladkii, F. M.** (1961)**Trud. vo.-med. Akad.*, 12 : 42(The content of unsubstituted amino acids in seafood). *Ru*

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J. Med. Pharm. Chem., 4 : 459-68 8-02254
 Some chemical and physical properties of paralytic shellfish poisons related to toxicity

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 (Aurantiasis cutis due to overeating of dried laver (nori): a case report).
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Geophys. Mag., Tokyo, 31 (1) : 105-26 8-02256
 Utilization of sea surface temperature data for fisheries and the special forecast for fishing operations in Japan

CR 61-05509. General review of subject under headings: General aspects of the acquisition of marine data in Japan; Ten-day marine report; Meteorological contribution to the fishing operation; Utilization of water temperature for fishing operation; Role of the Nagasaki Marine Observatory in the collaboration with fisheries; Examples of other governmental and/or civil organizations.

- Wright, P. S. & E. M. de S. Santos** (1962) M
 Santa Catarina, Brasil, 64 p. 8-02257
 Fecopesca—Projeto de financiamento (Fecopesca—financing project). *Pr*

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Contr. Va Fish. Lab., 1960-61 (89) : 8-02258
 The pound-net fishery in Virginia—Part 2. Species composition of landings reported as menhaden
 CR 60-6445.

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Inf. Inst. Invest. Resours. Mar., Callao, (1) : 12 p. 8-02259
 La pesca de la anchoveta—Estadística de pesca y esfuerzo en octubre, noviembre y diciembre de 1961 (The fishery for anchoveta—Fishing and effort statistics for October, November and December 1961)

Tables, diagrams and interpretative notes.

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Proc. Gulf Caribb. Fish. Inst., 13 (1960) : 59-62 8-02260
 The multiple-use of shrimp trawlers

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Proc. Gulf Caribb. Fish. Inst., 13 (1960) : 67-73
 New methods of purse seining for tuna in the eastern Pacific Ocean
- Considers technological changes and increased availability responsible for a portion of the increase in seiner fishing success.
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Proc. Gulf Caribb. Fish. Inst., 13 (1960) : 73-86
 Air-bubble and electrical-field barriers as aids to fishing
- Maine sardine fishing gear, air-curtain trials on herring, menhaden trials, and marine electric fence.
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 Economic aspects of markets for middle Atlantic oysters
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- An attempt to consider the biological aspects of the oyster industry.
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 Industry's appraisal of the future of the oyster industry
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 [Publ.] *Mar. Lab. Univ. Miami*, (62-1): 12 p.
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- Results of studies of life cycle immediately associated with settlement and effect of copper on those stages. Attachment process of *Balanus amphitrite niveus* were investigated.
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Fish. tech. Rep. N.Z. Mar. Dep., (4) : 49 p.
 A review of present knowledge relative to a possible tuna fishery in New Zealand
- List of tuna spp. found in New Zealand, distribution of Australian tunas; results of tuna surveys in various oceans and description of tuna boats and gear.

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No
 Number of men employed on the whaling expeditions in the seasons
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Norsk Hvalfangsttid., 51 (2) : 60-1
 The Norwegian catch of small whales in 1961. *En* *No*
 Seasons and areas of catches.
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8-02270
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 Catch reports—Pelagic catch in the season 1961-62. *En* *No*
 Whale oil reports from pelagic expeditions operating in the Antarctic.
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Norsk Hvalfangsttid., 51 (2) : 65-74
 Catch reports from South Georgia. *En* *No*
- Anon. (1962)** M
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 Catch reports—The summer season 1961
 Catch results of some whaling companies operating on fields outside the
 Antarctic. Results for the five previous seasons are also incl.
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Invest. pesq., (20) : 73-8
 Influencia de las ecosondas en una pesquería de sardina (Influence of
 echo-sounders on sardine fishery). *En*
 Results obtained for boats before and after installation of echo-sounders
 are compared with results from a standard boat.
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Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 1-2
 Shrimp conservation on the high seas
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The mechanical performance of Gulf of Mexico shrimp trawls

Abstr. only.

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Fish meal—Another international problem

Ci 60-314me.

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The fishery resources and the fishery industries of the Netherlands Antilles

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Loesch, H. (1962)

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The developing shrimp fishery of Honduras

Refers to FAO/EPTA project.

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Idyll, C. P. (1962)

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Marine sport and commercial fishery potentials of British Honduras

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Miles, C. (1962)

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Recent developments in the Brazilian fisheries

Refers to FAO activities.

M

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Tucker, D. G. (1962)

New Scient., 15 (296) : 134-6

Searching the sea with sound

International symposium on sonar systems held in Birmingham under joint sponsorship of British Institution of Radio Engineers—Electroacoustics and Radar Groups—, Institute of Physics & Physical Society—Acoustics Group—, and Electrical Engineering Department of the University of Birmingham. Future of non-military sonar (asdic) was discussed. Improvements in technique should make possible the observation of individual small fish, while the study of the sea-bed will be assisted by better directional devices.

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Marine nematodes of the family Linhomoeidae from the Arabian Sea at Karachi

Incl. 13 spp. of the family Linhomoeidae, of which the following 6 are described as new: *Cinctonema papillata*, *Megadesmolaimus contortus*, *Metalinhomoeus karachiensis*, *Spirina striaticaudatus*, *Terschellingia lissa* and *T. longissimicaudata*; *Terschellingia communis* of Gerlach, 1955 *non de Man*, 1888 is renamed *T. magna* n. nov.

- Berkeley, E. & G. Berkeley** (1962) M
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Canad. J. Zool., 40 (4) : 571-7

Polychaeta from British Columbia: with a note on some western Canadian Arctic forms

9 spp. of Polychaeta collected off the coast of British Columbia are recorded.

- Ching, H. L.** (1962) M
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Canad. J. Zool., 40 (4) : 675-6

Six larval trematodes from the snail, *Littorina scutulata* Gould of San Juan Island, U.S.A., and Vancouver, B.C.

Trematodes, the localities and number of snails infected are listed.

- Boyd, J. M. & R. M. Laws** (1962) M
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Observations on the grey seal (*Halichoerus grypus*) at North Rona in 1960

Ci 62-06022. Expedition visited North Rona 16 Oct. and 7 Nov. 1960. The work done supplements 62-06022. Spatial distribution of seal colony is described in relation to vegetation. Census. Moulters were branded and/or tagged. Recoveries from Iceland, Faroes, Norway, Scotland and Eire.

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The existence of sexual dimorphism of blood plasma in fishes of the family Labridae

Investigation of blood plasma during and after spawning of *Labrus mixtus*, *Crenilabrus melops*, *C. mediterraneus*, *C. pavo* and *C. ocellatus*.

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(The possibilities of the utilization of the sea mussel, *Mytilus edulis* L., in Poland). Pl En Ru

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Record of capture and taxonomic information.

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Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 3-16

Recent trends in white shrimp stocks of the northern Gulf

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8-02383

Washington, USFWS, mimeo, 5 p.

Azygopterus corallinus (Pisces, Blennioidei). A new fish without paired fins

Describes a single specimen of a fish collected in 1951 in the Kurile Islands by dredging at 130 m. The new species is provisionally assigned to the Stichaeidae. Available from Ichthyological Laboratory, USFWS.

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Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 16-20

Survival of stained, tagged, and unmarked shrimp in the presence of predators

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Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 201-41

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M

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S. Afr. Shipp. News Fish. Ind. Rev., 17 (6) : 65

Long line boats take big tuna catches off Cape

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8-02388
Moscow, 113 p.

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Description and catch statistics of tunas and related spp.

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Ten thousand tiny turtle tags

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 (On the nature of adaptive changes in the neural apparatus of the digestive system in carps, family Cyprinidae, fed various foods—An experiment with the ecological approach to the morphological study of the nervous system). *Ru*

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8-02471
Ann. N.Y. Acad. Sci., 97 : 116-30
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- Flock, A. & J. Wersall** (1962)* F
8-02472
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 Synaptic structures in the lateral line canal organ of the teleost fish *Lota vulgaris*

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Vop. Pitan., 21 : 83-4
 (Content of ascorbic acid in some types of fish in the Ob basin). *Ru* F
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8-02474
- Khalil, L. F.** (1962)*
J. Helminth., 36 : 51-8
 On two new nematodes from freshwater fishes in the Sudan of the genus *Spironoura* Leidy, 1856 and the relation of *Spironoura* to the genus *Velariocephalus* Singh, 1958 F
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J. Parasit., 48 (2) : 291-2
Nitzschia quadritestis sp. n. (Monogenea: Capsalidae) from the Columbia River sturgeon F
8-02476
- HA 32 (1) 731. Described from the gills of *Acipenser transmontanus* from the brackish-water region, Oregon (U.S.A.).
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J. Neurophysiol., 25 : 430-49
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8-02477
- Massmann, W. H. & A. L. Pacheco** (1962)
Contr. Va Fish. Lab., 1960-61 (91)
 Disappearance of young Atlantic croakers from the York River, Virginia
 CR 61-02029. F
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- U.S. Department of the Interior** (1962)
News Rel. U.S. Dep. Int., August, 1 p.
 Interior Department sets lands aside for new national fish hatchery in Utah F
8-02479
- Announcement of plans for trout culture and restocking in upper Colorado River—Jones Hole.
- Miles, C.** (1961)
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 A world-wide approach to fish culture improvement F
8-02480
- Proposal of world effort to investigate possible culture of imperfectly known spp.

Dees, L. T. (1961)F
8-02481*Fish. Leaflet, Wash.*, (525) : 5 p.The mosquitofish, *Gambusia affinis*

Range, foreign introductions, habitat, life history, enemies, culture, dealers.

Weitzman, S. H. (1962)F
8-02482*Stanf. ichthyol. Bull.*, 8 (1) : 77 p.The osteology of *Brycon meeki*, a generalized characid fish, with an osteological definition of the family**Timmermans, J. A.** (1961)F
8-02483*Trav. Sta. Rech. Groenendaal*, D (33) : 51 p.Infections par *Pseudomonas* chez les poissons d'eau douce (Infection by *Pseudomonas* in freshwater fishes). *Fr Ne*

Pathological agents, symptoms, evolution of contamination; means of control.

Meisner, H. M. & C. P. Hickman, Jr. (1962)F
8-02484*Canad. J. Zool.*, 40 (2) : 127-30Effect of temperature and photoperiod on the serum proteins of the rainbow trout, *Salmo gairdneri*

Serum of 1- and 2-year old rainbow trout, acclimated at least 43 days to four conditions of temperature and daylength—16°-8L (hours daily photoperiod), 16°-16L, 8°-8L, and 8°-16L—was examined by paper electrophoresis. The albumin/globulin ratio was significantly greater in trout acclimated to 8°C—pooled photoperiod—than in those acclimated to 16°C—pooled photoperiod. Photoperiod had no significant effect on the serum protein pattern.

Farley, J. (1962)F
8-02485*Canad. J. Zool.*, 40 (2) : 131-3*Schistosomatum douthitti* (Cort, 1914) Price, 1931 in Manitoba

Cercariae of *S. douthitti* have been found in two lakes in Manitoba, in which cases of schistosome dermatitis occurred. One adult female *S. douthitti* was recovered from a naturally infected meadow-vole, *Microtus pennsylvanicus*. This is the first report of the parasite in Manitoba. *Cercaria elvae* was also widespread throughout the southern region of the province.

de Wit, J. J. Duyvené (1962)

F
8-02486

Canad. J. Zool., 40 (2) : 255-9

Hybridization experiments in acheilognathine fishes (Cyprinidae, Teleostei)
—The hybrids between female *Acheilognathus lanceolatus* and *Rhodeus amarus*
and male *Acheilognathus himantegus*

Hybridization between *A. lanceolatus* from Japan \times *A. himantegus* from Taiwan and *R. amarus* from Holland \times *A. himantegus* has been reported. From both combinations, hybrids have been obtained with the aid of artificial insemination. A diagram is presented showing the gametic compatibility between *A. himantegus* and three other allopatric bitterling spp.

Hochachka, P. W. & F. R. Hayes (1962)

F
8-02487

Canad. J. Zool., 40 (2) : 261-70

The effect of temperature acclimation on pathways of glucose metabolism in the trout

Salvelinus fontinalis.

Lindsey, C. C. (1962)

F
8-02488

Canad. J. Zool., 40 (2) : 271-312

Experimental study of meristic variation in a population of threespine sticklebacks, *Gasterosteus aculeatus*

Eggs of 21 pairs of wild sticklebacks from Hobson's Brook near Cambridge, England, were reared under various controlled temperatures and salinities. 253 young were examined for counts of abdominal and caudal vertebrae, dorsal and anal spines and soft fin rays and basal supports, segmented and simple caudal rays, and pectoral rays. Lateral plates were counted on 95 young.

Magnuson, J. J. (1962)

F
8-02489

Canad. J. Zool., 40 (2) : 313-63

An analysis of aggressive behavior, growth and competition for food and space in medaka (*Oryzias latipes* (Pisces, Cyprinodontidae))

The role and consequences of aggressive behavior in competition for food and space were studied among laboratory populations of juvenile medaka. Growth rate, used to measure the success of an individual fish in different competitive situations, was followed for 648 fish in populations of 1, 2, 4, 8, or 16 fish in 1-, 4-, or 8-liter baskets.

Sale, P. F. (1962)

F
8-02490

Canad. J. Zool., 40 (2) : 367-9

A note on the lethal temperature of the aurora trout, *Salvelinus timagamiensis*

Myers, B. J., R. E. Kuntz & W. H. Wells (1962)

F
8-02491

Canad. J. Zool., 40 (4) : 531-8

Helminth parasites of reptiles, birds, and mammals in Egypt—7. Check list of nematodes collected from 1948 to 1955

Nematodes identified from vertebrates collected in Egypt by the US Naval Medical Research Unit no. 3 are listed under hosts.

Henderson, N. E. (1962)

F
8-02492

Canad. J. Zool., 40 (4) : 631-41

The annual cycle in the testis of the eastern brook trout, *Salvelinus fontinalis* (Mitchill)

The annual cycle can be divided into six stages. A histological description is given of each of these stages and of the structure of the gonads.

Meisner, H. M. (1962)

F
8-02493

Canad. J. Zool., 40 (4) : 643-53

The effect of propylthiouracil on the oxygen consumption and iodine metabolism of the frog, *Rana pipiens*, in winter

Morris, R. W. (1962)

F
8-02494

Amer. Nat., 96 (886) : 35-50

Body size and temperature sensitivity in the cichlid fish, *Aequidens portalegrensis* (Hensel)

Considers the relationship that may exist between size and acutely measured Q_{10} in a single fish sp. and attempts elucidation of some of the factors that appear to affect the relationship.

Gadri, S. S. (1962)

F
8-02495

Proc. zool. Soc. Lond., 139 (2) : 329-35

New Myxosporidia from some British freshwater fishes

Account is given of morphology, systematic position and differential diagnosis of *Myxidium scardini* sp. n. in gall bladder of *Scardinius erythrocephalus* from lake Windermere, Westmorland, England, *Zschokkella cyprini* sp. n. of *Cyprinus carpio* from gravel pit near Shenley, Hertfordshire and *Chloromyxum phoxini*, sp. n., in bile of small *Phoxinus phoxinus* from Lake Windermere.

Dehadrai, P. V. (1962)

F
8-02496

Proc. zool. Soc. Lond., 139 (2) : 341-57

Respiratory function of the swimbladder of *Notopterus* (Lacépède)

Aspects of anatomy, histology and physiology of swimbladder studied, with special reference to its behaviour in aerial respiration. Frequency and extent of aquatic and aerial respiration in *Notopterus* under different conditions determined. Comparative discussion concerning air-breathing in *Amia*, *Lepidosteus*, *Erythrinus*, and *Phractolaemus*.

- Olaniyan, C. I. O.** (1961) F
8-02497
J. W. Afr. Sci. Ass., 7 (1) : 74-92

On the introduction of the common carp, *Cyprinus carpio* L., into Nigerian waters and its possible effect on the hydrography of the region

Introduced in Oct. 1954 for stocking artificial ponds constructed at Panyam. Investigations to ascertain whether carp alters physical properties of the water to a greater extent than the indigenous spp. of fishes and also whether it is likely to have serious deleterious effect on the freshwater plankton. Carried out in selected ponds at Panyam and in two paddocks, being disused tin-mining pits full of water, at Bukuru.

- Verheijen, F. J.** (1962) F
8-02498
Naturwissenschaften, 49 (15) : 356

Alarm substance and intra-specific predation in cyprinids

Ci 1941 Berwein, M. Observations in aquarium of *Semotilus atromaculatus* Mitchill ranging from 4 to 12 cm in length. This is North American cyprinid in which occurrence of alarm substance has recently been demonstrated. Hypothesis that alarm substance protects cyprinid fry against predation by more or less adult fish was based upon observation of Berwein that *Phoxinus laevis* Agassiz were frightened after predation upon minnows 1.3 to 1.6 cm long.

- Lewis, J. B.** (1962) F
8-02499
Proc. Gulf Caribb. Fish. Inst., 14 (1961) : 199-201

Preliminary experiments on the rearing of the fresh water shrimp, *Macrobrachium carcinus* (L.)

- Fishelson, L.** (1962) F
8-02500
Fish. Bull., Haifa, 4 (2 (32)) : 14-9

(Hybrids of two species of fishes of the genus *Tilapia* (Cichlidae, Teleostei)).
Int. En

Ci 571029, 59-1614, 60-5486, 60-9995 and 61-02063. Hybrid obtained by crossing female *T. nilotica* from pond of Tel-Aviv Zoo with male of probably a new sp. of *Tilapia*, in this paper named the "blue", caught in Hula in 1958. Description of systematic position of these spp. is in preparation by Dr. E. Trewawas. Morphological descriptions of two parents and the hybrid are given.

- Anon.** (1962) F
8-02501
Selec. agric., 17 (193) : 40

Criação do peixe-rei em açudes e represas (Culture of silversides in ponds and reservoirs). *Pr*

Instructions for culture of *Basilichthys bonariensis*.

- Sneed, K. E. & H. K. Dupree** (1962) F
8-02502
Curr. Aff. Bull. Indo-Pacif. Fish. Coun., (34) : 12-6
 The effect of thyroid-stimulating hormone combined with gonadotrophic hormones on the ovulation of goldfish and green sunfish

CR 62-03978.

- Schäperclaus, P. W.** (1961) F
8-02503
Bull. franç. Piscic., 34 (203) : 49-65
 Les maladies des poissons (Fish diseases)

Fish parasites and diseases caused by them.

- Schäperclaus, P. W.** (1962) F
8-02504
Bull. franç. Piscic., 34 (204) : 93-105
 Les maladies des poissons (Fish diseases)

Co 8-02503. Diseases caused by protozoarians parasites of fishes.

- Morawa, F.** (1962) F
8-02505
Bull. franç. Piscic., 34 (204) : 132
 A propos de la répartition de la graisse chez quelques black-bass (*Micropterus salmoides* Baily et Hulls 1949) (About the distribution of fats in some black-basses, *Micropterus salmoides* Baily et Hulls 1949)

Analysis of distribution of fat in various parts of the body of black-basses.

- Gruber, R.** (1961)* F
8-02506
Biométrie, 2 (3-4) :
 Une application de l'ajustement au moyen d'un système de polynômes orthogonaux en pisciculture (An application of the adjustment to the mean of a system of orthogonal polynomials in fish culture)

- Hocking, B. & J. M. Hocking** (1961) F
8-02507
 WHO, AFR/Onchocerciasis (1961)/A-1, mimeo, 16 p.
 Recent advances in entomological aspects of African onchocerciasis and some observations on *Simulium* in the Sudan

Do 61-353me.

- Williams, T. R., H. B. N. Hynes & W. E. Kershaw** (1961) F
8-02508
 WHO, AFR/Onchocerciasis (1961)/A-2, mimeo, 11 p.
 Freshwater crabs and *Simulium neavei*

Do 61-353me.

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8-02509
- Hynes, H. B. N., T. R. Williams & W. E. Kershaw** (1961)
WHO, AFR/Onchocerciasis (1961)/A-3, mimeo, 7 p.
The animal community of a river containing *Simulium*
Do 61-353me.
- F
8-02510
- Keiding, J.** (1961)
WHO, AFR/Onchocerciasis (1961)/A-5, mimeo, 6 p.
Problems of *Simulium* control and suggestions for research
Do 61-353me.
- F
8-02511
- Crosskey, R. W.** (1961)
WHO, AFR/Onchocerciasis (1961)/A-6, mimeo, 7 p.
The identification of the larvae of African *Simulium*
Do 61-353me.
- F
8-02512
- Davies, J. B. et al.** (1961)
WHO, AFR/Onchocerciasis (1961)/A-7, mimeo, 37 p.
The control of *Simulium damnosum* at Abuja, northern Nigeria, 1955-1960
Do 61-353me.
- F
8-02513
- Barnley, G.** (1961)
WHO, AFR/Onchocerciasis (1961)/2, mimeo, 14 p.
Geographical distribution and incidence of onchocerciasis in Uganda—
Geographical distribution of onchocercal eye lesions in Uganda—Transmission
potential of *Simulium* vectors in onchocerciasis in Uganda
Do 61-353me.
- F
8-02514
- Saugrain** (1961)
WHO, AFR/Onchocerciasis (1961)/5, mimeo, 5 p.
Report on the campaign against simulia carried out at Djoué in 1958-1959
Do 61-353me.
- F
8-02515
- Doll** (1961)
WHO, AFR/Onchocerciasis (1961)/6, mimeo, 17 p.
Geographical division and incidence of onchocerciasis in the Congo Republic
(capital Brazzaville): local epidemiology
Do 61-353me.

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8-02516

Gilles (1961)

WHO, AFR/Onchocerciasis (1961)/7, mimeo, 6 p.

Onchocerciasis incidence in the districts of Madingou (Préfecture du Niari Bouenza) Abala & Gamboma (Préfecture de l'Alima-Léfini), Republic of the Congo (Brazzaville)

Do 61-353me.

F

8-02517

Gilles, J. C. (1961)

WHO, AFR/Onchocerciasis (1961)/8, mimeo, 17 p.

Human onchocerciasis in the sub-prefecture of Boko (Prefecture of the Pool), République du Congo—Brazzaville

Do 61-353me.

F

8-02518

Gilles (1961)

WHO, AFR/Onchocerciasis (1961)/9, mimeo, 13 p.

Incidence of onchocerciasis in the lower Djoué Valley (Sub-prefecture of Brazzaville) (Prefecture of Djoué), Republic of the Congo, Brazzaville

Do 61-353me.

F

8-02519

Richet, P. (1961)

WHO, AFR/Onchocerciasis (1961)/10, mimeo, 16 p.

Geographical distribution and incidence of onchocerciasis in Africa—Local epidemiology

Do 61-353me.

F

8-02520

Richet, P. (1961)

WHO, AFR/Onchocerciasis (1961)/13, mimeo, 9 p.

Combined control projects of onchocerciasis and other transmissible diseases

Do 61-353me.

F

8-02521

Richet, P. (1961)

WHO, AFR/Onchocercose (1961)/13-Annexe, mimeo, 60 p.

Campagne contre l'onchocercose dans la région du Mayo-Kebbi janvier-mai 1955 (Campaign against onchocerciasis in the Mayo-Kebbi region, January-May 1955)

Do 61-353me.

F

8-02522

Marr, J. D. M. (1961)

WHO, AFR/Onchocercose (1961)/14, mimeo, 20 p.

L'utilisation d'une gîte larvaire artificiel et d'une cage pour l'étude des *Simulium* Théobald (The utilization of an artificial larvae deposit and a cage for the study of *Simulium* Théobald)

Do 61-353me.

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- F
8-02523
- Duke, B. O. L.** (1961)
WHO, AFR/Onchocerciasis (1961)/17, mimeo, 8 p.
The development of new methods of therapy and control
Do 61-353me.
- F
8-02524
- Doll** (1961)
WHO, AFR/Onchocerciasis (1961)/19, mimeo, 3 p.
Estimate for a campaign against the breeding grounds of *Simulium* larvae between the Djoué Dam and the confluence of the Djoué and the Congo
Do 61-353me.
- F
8-02525
- QueIennec, G.** (1961)
WHO, AFR/Onchocercose (1961)/20, mimeo, 8 p.
Enquêtes préliminaires sur *Simulium damnosum* et l'onchocercose au Dahomey (Preliminary investigations of *Simulium damnosum* and the onchocerciasis in Dahomey)
Do 61-353me.
- F
8-02526
- QueIennec, G.** (1961)
WHO, AFR/Onchocercose (1961)/21, mimeo, 8 p.
Essais de portée de deux produits insecticides utilisés contre les larves de *Simulium damnosum* dans une rivière du nord Dahomey (Tests of the range of insecticides used against larvae of *Simulium damnosum* in a river of north Dahomey)
Do 61-353me.
- F
8-02527
- Noamesi, G. K.** (1961)
WHO, AFR/Onchocerciasis (1961)/23, mimeo, 7 p.
A preliminary study of the susceptibility of *Simulium* larvae to DDT, BHC and dieldrin
Do 61-353me.
- F
8-02528
- Ovazza, M.** (1961)
WHO, AFR/Onchocerciasis (1961)/24, mimeo, 32 p.
Recent advances in knowledge on *Simulium* in the Ethiopian region with particular reference to species transmitting human onchocerciasis
Do 61-353me.
- F
8-02529
- Barnley, G.** (1961)
WHO, AFR/Onchocerciasis (1961)/29, mimeo, 5 p.
Control of *Simulium* vectors of onchocerciasis by local repetitive measures
Do 61-353me.

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McMahon, J. (1961)

F
8-02530

WHO, AFR/Onchocerciasis (1961)/30, mimeo, 4 p.

Notes on a proposed scheme for the control of *S. damnosum* in the region of the Kainji Dam, River Niger, northern Nigeria

Do 61-353me.

Meschkat, A. & W. A. Dill (1961)

F
8-02531

WHO, AFR/Onchocerciasis (1961)/32, mimeo, 5 p.

Onchocerciasis and fisheries in Africa

Do 61-353me. Discusses briefly the importance of onchocerciasis as a limiting factor in fisheries development in certain otherwise productive areas, and mentions additional interest that FAO has in the methods for the control of its vector.

Janz, G. J. (1961)

F
8-02532

WHO, AFR/Onchocercose (1961)/33, mimeo, 14 p.

État actuel des connaissances sur l'onchocercose en Angola (Present state of the knowledge of onchocerciasis in Angola)

Do 61-353me.

Haseeb, M. A., M. H. Satti & M. Sherif (1961)

F
8-02533

WHO, AFR/Onchocerciasis (1961)/37, mimeo, 13 p.

Onchocerciasis in the Sudan

Do 61-353me.

Scidmore, W. J. & D. E. Woods (1961)

F
8-02534

Fish. Ser. Minn. Dep. Conserv., (3) : 1-19

Changes in the fish populations of four southern Minnesota lakes subjected to rough fish removal

SFA 7 (2) 4902.

Schumacker, R. E. (1961)

F
8-02535

Fish Ser. Minn. Dep. Conserv., (3) : 20-42

Some effects of increased angling pressure on lake trout populations in four north-eastern Minnesota lakes

SFA 7 (2) 4903.

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Micklus, R. C. (1961) F
8-02536
Fish. Ser. Minn. Dep. Conserv., (3) : 63-8

A report on Minnesota's first grayling season, Twin Lake, Lake County, September 21-29, 1957

SFA 7 (2) 4906. One of first lakes in Minnesota in which grayling were stocked. Introduced in Jul. 1955 after poisoning to remove rough fish in Sep. 1954.

Prather, E. E. (1960) F
8-02537
Proc. Conf. stheast. Ass. Game Commrs, 14 : 124

A note on the results of feeding fire ants to blue-gills and redear sunfish

SFA 7 (2) 4919. Fish were observed for a period of 10 weeks following feeding. Concluded that it is unlikely that imported fire ants are harmful.

Snow, J. R. (1960) F
8-02538
Proc. Conf. stheast. Ass. Game Commrs, 14 : 137-42

A comparison of spawning environments for the channel catfish

SFA 7 (2) 4921. During spawning seasons of 1958 and 1959 experiment conducted to compare the spawning success of channel catfish in three types of environment. Incl. 0.6-acre pond, 16 concrete-block holding pens and aquaria of 50 gallon capacity along with four concrete holding house tanks.

Prather, E. E. & H. S. Swingle (1960) F
8-02539
Proc. Conf. stheast. Ass. Game Commrs, 14 : 143-5

Preliminary results on the production and spawning of white catfish in ponds

SFA 7 (2) 4922. Two-year-olds were spawned successfully in ponds and in wire spawning pens constructed in ponds.

Nelson, B. A. (1960) F
8-02540
Proc. Conf. stheast. Ass. Game Commrs, 14 : 145-8
Spawning of channel catfish by use of hormone

SFA 7 (2) 4923.

Elser, H. J. (1960) F
8-02541
Proc. Conf. stheast. Ass. Game Commrs, 14 : 174-85
Escape of fish over spillways; Maryland, 1958-1960

SFA 7 (2) 4925. Four-pond study indicates great difference between ponds in loss of fish over dams.

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- Sanderson, A. E., Jr.** (1960) F
8-02542
Proc. Conf. stheast. Ass. Game Commrs, 14 : 185-98
 Results of sampling the fish population of an 88-acre pond by electrical, chemical and mechanical methods

SFA 7 (2) 4926. Trial of four gears suggests that rotenone sampling gave the best results.

- Geagan, D. W. & H. E. Schafer, Jr.** (1960) F
8-02543
Proc. Conf. stheast. Ass. Game Commrs, 14 : 222-5
 A report on the operation of a fishway on lake Bistineau, La.

SFA 7 (2) 4929. Opinion of authors that fishway is not a desirable structure as it provides little harvest for the angler and permits access into the lake of many undesirable fish.

- Snow, J. R.** (1960) F
8-02544
Proc. Conf. stheast. Ass. Game Commrs, 14 : 253-7
 An exploratory attempt to rear largemouth black bass fingerlings in a controlled environment

SFA 7 (2) 4930. Rearing techniques employed would have to be improved considerably to make procedure economically feasible.

- Sharpe, F. P.** (1962) F
8-02545
J. Tenn. Acad. Sci., 37 (1) : 8-14
 Creel census evaluation of a put-and-take trout stream in the Cumberland mountains of Tennessee

SFA 7 (2) 4942.

- Averett, R. C. & R. M. Stubbs** (1962) F
8-02546
J. Tenn. Acad. Sci., 37 (1) : 20-2
 Toward a safe and effective method of using dynamite to sample fish populations and determine species range in large rivers

SFA 7 (2) 4943. Outlines and discusses briefly conditions under which dynamite used, methods and procedures employed, and safety rules that are important.

- Lennon, R. E.** (1962) F
8-02547
J. Tenn. Acad. Sci., 37 (1) : 5-7
 An annotated list of the fishes of Great Smoky Mountains National Park

SFA 7 (2) 4944. Grouped by families according to phylogenetic order. Spp. within a family presented alphabetically by generic and specific names. Scientific and common names of families and spp. Brief statements on origin, abundance, and distribution of each fish. In those cases in which a sp. was observed in only one watershed, the name of the stream is given in parenthesis.

MISCELLANEOUS AND AUXILIARIES

Schoffman, R. J. (1962)

F
8-02548

J. Tenn. Acad. Sci., 37 (1) : 1-4

Age and rate of growth of the largemouth black bass in Reelfoot Lake, Tennessee, for 1952 and 1961

SFA 7 (2) 4945. Decrease in growth rate is in accord with decreased growth rate of bluegills, white crappies, and channel catfish.

Gumbmann, M. & A. L. Tappel (1962)

F
8-02549

Arch. Biochem., 98 (2) : 262-70

The tricarboxylic acid cycle in fish

Enzymes of TCA cycle demonstrated in cyprinid tissue homogenates or mitochondrial preparations. Carp liver mitochondria catalyze oxidation of TCA intermediates and glutamate accompanied by coupled phosphorylation of adenosine diphosphate.

Butler, R. L. (1962)

FG
8-02550

Calif. Fish Game, 48 (1) : 5-18

Recognition and return of trout tags by California anglers

Describes and analyses various techniques to reduce non-recognition or non-response by anglers and different programs to encourage the return of tags.

MISCELLANEOUS AND AUXILIARIES

Horwitz, J. P. & V. K. Vaitkevicius (1961)

M
8-02551

Experientia, 17 (12) : 552-3

Purin-6-yltrimethylammonium chloride: a new purine antimetabolite. De

Film (1962)

M
8-02552

Kultur-und Lehrfilm-Institut

Kurs Labrador (Towards Labrador)

16 mm and 35 mm, b and w, sound, 12 min.

Anon. (1962)

MF
8-02553

New Scient., 14 (291) : 564

William Beebe: zoologist and popularizer

Obituary of this zoologist.

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Anon. (1962)

MF
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New Scient., 13 (268) : 24-5

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From 2nd to 9th June, fixed stations along Finnish coast inspected. From 9th to 15th June, detailed study of delta of river Kemi, incl. determinations of t, S, O₂, pH, nutrients, turbidity and yellow substance. Samples for determination of Na, Mg, K, Ca, Cl, SO₄ and Sr⁹⁰ collected, and for marine geological and biological studies. From 16th to 18th June, hydrographical studies in Bothnian Bay. During 22nd June to 4th July, programme consisted of marine geological studies in the Gulf of Bothnia comprising stratigraphic and lithological observations. From 5th to 17th July, hydrography of Bothnian Sea and Åland Sea was studied, incl. collection of plankton samples by Erkki Halme. Hydrographical programme of Baltic proper; 20th July to 7th August. 2 weeks biological course, led by Paavo Tulkki. Last half of August spent in fisheries research.

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Publ. Oceanogr. Dep. Univ. Cape Town, (3)

Size distribution characteristics of shallow marine sands from the Cape of Good Hope, South Africa

CR 8-03077.

Robertson, R. G. (1960)*

M
8-03079

Trans. S. Afr. Instn civ. Engrs, 2 : 5

Discussion on "research and model studies on range action in Table Bay harbour, Cape Town", by Basil W. Wilson

Robertson, R. G. (1962)

M
8-03080

Publ. Oceanogr. Dep. Univ. Cape Town, (5)

Discussion on "research and model studies on range action in Table Bay harbour, Cape Town", by Basil W. Wilson.

CR 8-03079.

Robertson, R. G. (1960)*

M
8-03081

Trans. S. Afr. Instn civ. Engrs, 2 : 7

Discussion on "the troubled waters of Table Bay harbour" by W. C. Q. Joosting

Robertson, R. G. (1962)

M
8-03082

Publ. Oceanogr. Dep. Univ. Cape Town, (6)

Discussion on "the troubled waters of Table Bay harbour" by W. C. Q. Joosting

CR 8-03081.

Stefánsson, U. (1962)
Rit Fiskid. 3 (3) : 269 p.
 North Icelandic waters

M
 8-03083

General review of oceanography under main headings: Historical remarks; Previous investigations; The Icelandic investigations 1947-1960; Bathymetrical features; Water masses; General circulation of the Iceland Sea; The north Icelandic Irminger current; Distribution of temperature and salinity in summer; Temperature-salinity relations in spring and summer; Current velocity; Volume transport; Seasonal variations; Annual variations.

Ljøen, R. (1962)
Fiskeridir. Skr. Havundersøk., 13 (2) : 39 p.

M
 8-03084

The waters of the western and northern coasts of Norway in July-August 1957

Ci 60-6288. Research on hydrographical conditions of water masses in which biological investigations were simultaneously undertaken. Characteristic features of different masses described. Computation of relative current carried out in area off northern Norway. Correlation between hydrographical conditions and distribution of the various developmental stages of *Calanus finmarchicus*. To west of Bear Island relatively high volume of plankton may be related to an anticyclonic movement of the water masses. Deep water observations undertaken in the Norwegian Sea between 68° and 74° N and to the east of 8° E. Good conformity with corresponding conditions in southern part of the Norwegian Sea described by Mosby & Saelen.

Knauss, J. A. (1962)
J. Mar. Res., 20 (2) : 111-8

M
 8-03085

Observations of internal waves of tidal period made with neutrally buoyant floats

Floats at depths between 500 and 2500 m at 28° 12' N, 139° 07' W and 28° 48' N, 117° 41' W exhibited a marked periodic motion. Moved in clockwise orbits at speeds of 5-18 cm/sec and with a period of approximately 25 hours. Approximately equal to inertial period. Floats tracked simultaneously at different depths were not in phase. With one exception such motion has not been observed at other latitudes.

Munk, W. H., G. R. Miller & F. E. Snodgrass (1962)
J. Mar. Res., 20 (2) : 119-20

M
 8-03086

Long-period waves over California's continental borderland—Part 3. The decay of tsunamis and the dissipation of tidal energy

Characteristic damping—energy *e*-folding—time derived from decay of tsunami "pulse" can be compared to dissipation time of lunar semidiurnal tides as inferred from discrepancies in orbital motions of the Moon, Sun and Mercury. Suggests that same processes are responsible for dissipation of tide waves and tidal waves.

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Reid, J. L., Jr. (1962)

M
8-03087

J. Mar. Res., 20 (2) : 134-7

Measurements of the California countercurrent at a depth of 250 meters

Measurements of flow at 250 m below surface made with parachute drogues at 5-mile intervals on a line 125 nautical miles in length—true bearing 067°—extending landward from 35° 52.0' N, 124° 28.9' W to the 1000-fathom curve at 36° 36' N off Monterey, California. Drogues followed for 48 hours.

Reid, J. L., Jr. (1962)

M
8-03088

J. Mar. Res., 20 (2) : 138-48

Distribution of dissolved oxygen in the summer thermocline

Shown that at and above depths of summer maximum oxygen concentration remains very near the saturation concentration throughout the year, and hence depends principally upon the temperature. Seasonal variations in thermal structure shown to account for formation of subsurface maximum in summer.

Favorite, F., J. W. Schantz & C. R. Hebard (1961)

M
8-03089

Spec. sci. Rep. U.S. Fish Wildl. Serv.—Fish., (381): 323 p.

Oceanographic observations in Bristol Bay and the Bering Sea 1939-41 (USCGT 'Redwing')

Vessel and personnel, observations, stations, hydrographic casts, notes on tabulated data, station heading, observed data, computed data, literature cited, station data, 1939; station data, 1940; and station data 1941.

Anon. (1962)

M
8-03090

GeoTimes, 7 (1) : 8-11, 35

Status of the AMSOC oceanic deep drilling project

Anon. (1962)

M
8-03091

Instrum. Contr. Syst., 35 (8) : 166

Oceanographic instrument

New electrodeless induction salinometer eliminates need for both sample bottles and electrode maintenance. Salinity, temperature and conductivity readily measured to depths of 300 feet.

Ferrando, H. J. (1962)

M
8-03092

Rev. Inst. Invest. pesq. Fac. Vet., Montevideo, 1 (1) : 17-33

Determinación de la salinidad por medio del peso específico (Determination of the salinity by means of the specific weight). En Fr

Describes determination of the salinity through the Mohr-Westphal balance and presents 4 tables of direct conversion from specific weight to salinity, which allows to work at 18°C, 20°C, 22°C and 24°C.

- Stroup, E. D., D. W. Pritchard & J. H. Carpenter** (1961) M
8-03093
Tech. Rep. Chesapeake Bay Inst., (26) : 79 p.
 Final report Baltimore Harbor study

Investigation concerned primarily with physical description of waters of Baltimore Harbor and adjacent portion of Chesapeake Bay, objective being determination of mechanisms which bring about flushing of harbor and rate at which this occurs. Knowledge necessary for estimate of effect of introducing waste materials into harbor. 28 cruises made between July 1958 and December 1960.

- Howell Rivero, L.** (1962) M
8-03094
Bol. Cent. Coop. cient. UNESCO, Montevideo, (32) : 14-20
 Bosquejo historico de la oceanografia (Historical review of oceanography)

- Fonselius, S. H.** (1962) M
8-03095
Rep. Fish. Bd Swed. Hydrogr., (13) : 40 p.
 Hydrography of the Baltic deep basins

Measurements made during last 50 years and salinity increase of Baltic are described. Transport of bottom water between basins, salt inflows and stagnation periods discussed. Great salt inflow of 1952 and long stagnation which followed it described in detail. Conditions during 1960 and turnover of water in Gotland basin in 1961 are discussed and described. Accumulation of nutrient salts in Gotland basin during stagnation is described and conditions compared to other anoxic basins. Analysis method for hydrogen sulphide is described. Development of stagnation in Gotland basin is traced in detail. Speed of inflow is discussed.

- Anon.** (1962) M
8-03096
Fish. News, Lond., (2554) : 3
 Fishery hydrography
 Re 8-03076.

- Pratt, J. G. D.** (1960) M
8-03097
Rep. Trans.-Antarct. Exped., (4) : 23 p.
 Tides at Shackleton, Weddell Sea

Deals with tidal variations on the floating Filchner Ice Shelf, as noted with a Worden gravity meter.

- Woollard, G. P.** (1961) M
8-03098
Trans. Amer. geophys. Un., 42 (2) : 190
 [Reviews]
 Re 8-03097.

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- France. Institut Géographique National (1960)*** M
8-03099
Paris
Map of the Indian Ocean

- Lozinskaya, A. M., I. O. Tsimel'zon & V. V. Laskina (1960?)*** M
8-03100
Results of a regional survey in the Caspian Sea with underwater gravimeters

En 1956 Lozinskaia, A. M., I. O. Tsimel'zon & V. V. Laskina. Available from the Library of Congress, Washington, D.C.

- Veselov, K. Ye. (1960?)*** M
8-03101
On the static method of gravity measurements at sea with the use of an elastic rotating system

En 1956 Veselov, K. E. Available from the Library of Congress, Washington, D.C.

- Anon. (1961)** M
8-03102
Trans. Amer. geophys. Un., 42 (2) : 255-61
IGY Bulletin—Analysis of gravels from the Arctic Ocean floor

- von Arx, W. S. (1962)** M
8-03103
London, Addison-Wesley Publ. Co., Inc., 422 p.
An introduction to physical oceanography

A textbook of subject, with main chapter headings: Early explorations and ideas; On geological and astronomical backgrounds; Tides and other waves; Fluid mechanics; Characteristics of sea water; Advective processes; Convective processes; Current measurements by direct methods; Current measurements by indirect methods; Laboratory models; The Gulf Stream problem; and appendices on: Some events that have influenced thought in the marine sciences; Miscellaneous astronomical constants; Miscellaneous terrestrial constants; Gross properties of sea water; Glossary of symbols; Smaller handbooks and tables of constants. Incl. name and subject indexes.

- Ramsey, W. L. (1962)** M
8-03104
Limnol. Oceanogr., 7 (1) : 1-7
Bubble growth from dissolved oxygen near the sea surface

Calculation shows that high degree oxygen-supersaturation necessary to cause growth of existing invisible bubbles at depths exceeding a few feet; data on distribution of dissolved oxygen in shallow water off San Diego, California, presented and related to possible growth of bubbles.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

Higaki, S. & H. Zeitlin (1962)

Limnol & Oceanogr., 7 (1) : 103

Notes and comment—Nitrate in Hawaiian waters

M
8-03105

In 1956 station near Koko Head, Oahu, established by Honolulu Biological Laboratory of the US Bureau of Commercial Fisheries to provide information regarding the circulating water system of the Hawaiian Islands. In 1959 as part of investigation on chemical characteristics of waters, method of Mullin & Riley (1955) was applied for determination of nitrate.

Bruevich, S. V. (1962)

M. 6315

Standardization of methods of chemical research and methods of expressing sea-water analyses.

En 59-2922. Available from National Lending Library for Science and Technology, Boston Spa, Yorkshire.

M
8-03106

Maksimov, I. V. (1961)*

Okeanologia, (2) : 206-12

(The long period cycle of solar activity and the North Atlantic current).
Ru

M
8-03107

Maksimov, I. V. (1962)*

M. 3872

The long period cycle of solar activity and the North Atlantic current

En 8-03107. Available from the National Lending Library for Science and Technology, Boston Spa, Yorkshire.

M
8-03108

Sysoiev, N. N. (1961)*

Okeanologia, 1 (6) : 1079-82

(New auto-recorders for anchored buoy stations). *Ru*

M
8-03109

Sysoyev, N. N. (1962)*

M. 6310

New auto-recorders for anchored buoy stations

En 8-03109. Available from the National Lending Library for Science and Technology, Boston Spa, Yorkshire.

M
8-03110

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Rakestraw, N. W. et al. (Ed.) (1960)
 Berkeley, Univ. Calif. Press, 508 p.
 Oceanic observations of the Pacific 1950

M
 8-03111

Co 61-04998. First volume of projected series for publication of data collected in Pacific Ocean and adjacent seas by cooperating agencies. These are Scripps Institution of Oceanography of the University of California, La Jolla, California; Department of Oceanography of the Univ. of Washington, Seattle, Washington; US Navy Electronics Laboratory, San Diego, California; Pacific Oceanic Fishery Investigations, USFWS—now Biological Laboratory of the Bureau of Commercial Fisheries—, Honolulu, Territory of Hawaii; Pacific Oceanographic Group of the Fisheries Research Board of Canada, Nanaimo, British Columbia; South Pacific Fishery Investigations, USFWS—now Biological Laboratory of the Bureau of Commercial Fisheries—, La Jolla, California. It is hoped that other agencies engaged in oceanographic studies in the Pacific area will utilize this serial. For each station, temperature, salinity, oxygen, phosphate, or other measured concentrations are tabulated at observed and at standard depths. Computed values of density, specific volume anomaly and geopotential anomaly are also tabulated. Numbers of bathythermograph observations during 1941 to 1950, and in 1950, shown by five-degree squares. Positions of serial observations shown on appropriate charts, and information concerning cruises on which observations were made summarized in table.

Anon. (1962)
Vickers Mag., winter 1961–62: unpag. Repr. 1 p.
 How salt is the sea?

M
 8-03112

Note on ICES discussion, salinometer developments, work of H.M.S. 'Scott'.

Carruthers, J. N. (1962)
Vickers Mag., winter 1961–62: unpag. Repr. 6 p.
 The salty ocean

M
 8-03113

Summary article on chemical composition of sea water and its determination, with reference to ICES discussions, and recent work by Cox.

P.-A. (1962)
Industr. pesq., Vigo, 36 (845): 246

M
 8-03114

Indice de publicaciones (Index of publications)—Fishery hydrography

Re 8-03076.

AERE/UK. Production Group (1962?)*
 London, H.M.S.O., 312 (W)

M
 8-03115

Analytical method for the determination of ruthenium-103, ruthenium-106, caesium-137, zirconium/niobium-95 and cerium-144 in shore sand and sea silt samples

- M
8-03116
- Bogdanov, K. T. & V. P. Nefed'ev** (1962)
Dokl. Akad. Nauk SSSR, 144 (5) : 1034-7
 Novye kotidal'nye karty sutochnykh prilivnykh voln K_1 i O_1 Avstral'-Aziatskikh morei (New cotidal charts of diurnal tidal waves (K_1 and O_1) in Australo-Asiatic seas)
- M
8-03117
- Klenova, M. V., V. M. Lavrov & V. K. Nikolaeva** (1962)
Dokl. Akad. Nauk SSSR, 144 (5) : 1153-5
 Raspredelenie vzvesi v Atlanticheskom okeane v svyazi s rel'efom dna (The distribution of suspension in the Atlantic as connected with its bottom topography)
- M
8-03118
- Kuz'mina, A. I.** (1962)
Dokl. Akad. Nauk SSSR, 144 (5) : 1156-9
 Nekotorye dannye o vessenem fitoplanktone Severnoi Atlantiki (po materialam 2 reisa nauchnoissledovatel'skogo sudna 'Lomonosov', 1958 g.) (Certain data on the vernal phytoplankton of the North Atlantic, from data of the 2nd voyage of the e.s. 'Lomonosov' in 1958)
- M
8-03119
- Semerchan, A. A. & D. B. Balashov** (1962)
Dokl. Akad. Nauk SSSR, 146 (3) : 592-5
 Konstruktsiya i ispytanie konteinerov dlia geofizicheskikh issledovaniy na bol'shikh glubinakh okeana (Design and test of containers for geophysical investigations at great sea depths)
- M
8-03120
- Mamaev, O. I.** (1962)
Dokl. Akad. Nauk SSSR, 146 (2) : 347-9
 T, S-krivye i vertikal'naia ustoychivost' vod okeana (T, S-curves and the vertical stability of ocean waters)
- M
8-03121
- Shuleikin, V. V.** (1962)
Dokl. Akad. Nauk SSSR, 144 (4) : 781-4
 Edinaia kharakteristika turbulentnoi v'язkosti dlia morskikh voln i techenii (A single characteristic of turbulent viscosity for sea waves and currents)
- M
8-03122
- Voit, S. S.** (1962)
Dokl. Akad. Nauk SSSR, 144 (1) : 93-6
 Integrirovanie uravnenii prilivov v odnom sluchae neustanovivshegosia dvizheniya (Integration of flood tide equations in a certain case of unsteady motion)
- M
8-03123
- Neprochnov, Iu. P.** (1962)
Dokl. Akad. Nauk SSSR, 144 (2) : 438-40
 Novye dannye o stroenii zemnoi kory pod dnom Indiiskogo okeana (Recent data on the structure of the earth crust underlying the bottom of the Indian Ocean)

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8-03124
Dokl. Akad. Nauk SSSR, 143 (3) : 701-4
 Nekotorye dannye po izucheniiu ilovykh vod Mramornogo i Sredizemnogo morei (Certain data contributing to the study of silt waters of the Sea of Marmara and the Mediterranean)
- Nekrasova, V. A. & V. N. Stepanov** (1962) M
8-03125
Dokl. Akad. Nauk SSSR, 143 (3) : 713-6
 Tipy izmeneniia temperatury vody po vertikali v Mirovom okeane (Types of water temperature variation along the vertical in the world ocean)
- Vaux, D.** (1961) M
8-03126
Fish. Newslett. Aust., 20 (11) : 19-20
 Measurement of seawater temperature by fishermen
 WFA 13 (3) : 5. Tuna, mackerels, etc.—exploration—eastern Pacific, Australia.
- Uusitalo, S.** (1961) MG
8-03127
Geophysica, Helsinki, 7 (3) : 191-3
 On the diffusivity of turbulent flow
 Theoretical considerations. Issued also as: *Contr. Inst. Mar. Res. Helsinki*.
- Byrne, J. V. & L. D. Kulm** (1962) MG
8-03128
Limnol. & Oceanogr., 7 (1) : 106-8
 Notes and comments—An inexpensive lightweight piston corer
- Rattray, M., Jr. & D. V. Hansen** (1962) MF
8-03129
J. Mar. Res., 20 (2) : 121-33
 A similarity solution for circulation in an estuary
 Set of partial differential equations and boundary conditions written to describe flow and mixing in simple class of estuaries. Two sets of similarity transformations given which, with appropriate boundary conditions, reduce partial differential equations to pair of simultaneous ordinary differential equations. One set used to obtain physically realistic solution.
- Kachurin, L. G.** (1960)* MF
8-03130
Izv. Akad. Nauk SSSR (geofiz.), (10)
 (Calculation of the supercooling of water beneath ice and the rate of growth of ice in waters with allowance for the actual temperature of the crystallization front). *Ru*

Jeffries, H. P. (1962)

MF
8-03131

Limnol. & Oceanogr., 7 (1) : 21-31

Environmental characteristics of Raritan Bay, a polluted estuary

Temperature, salinity, dissolved O_2 , PO_4 -P, and NO_3 -N in bay, N.J., determined over 16-month period. Combination of rich nutrient supplies arising from natural and domestic sources, plus a sluggish circulation, efficient nutrient regeneration mechanism, and scarcity of macroscopic algae combined to form an estuarine environment capable of supporting extremely dense plankton populations.

U.K. Atomic Energy Authority, Production Group (1961?)*

MF
8-03132

London, H.M.S.O., PG 155 (W)

Analytical methods for the determination of caesium-137, strontium-89 and 90 in rain, lake and sea water

Bachmann, R. W. (1962)

F
8-03133

Thesis, Univ. of Michigan, 88 p.

An experimental study of the freshwater zinc cycle

DA 23 (1) : 358-9. Zinc is found in lakes in both solid and liquid phases. This study was designed to determine, quantitatively, some factors which influence this distribution. Zinc-65 was used as tracer to measure uptake by suspensions of alga *Golenkinia paucispina*, organic detritus, bottom sediments, and natural lake seston. Uptake curves were approximated by the Elovich equation. *Daphnia pulex* and *D. magna* accumulated only insignificant fractions of the zinc in the water and lost some of this upon being placed in a fresh medium. When oxidized sediments disturbed by burrowing nymphs of mayfly *Ephemera simulans*, zinc concentration approached a uniform distribution with depth in the sediments. Hypothetical outline of cycle is characterized by exchanges between dissolved zinc and suspended materials, rooted aquatic plants, and bottom sediments.

Hoffman, D. A. (1962)

F
8-03134

Thesis, Colorado State Univ., 76 p.

The concentration and accumulation of radioactive phosphorus by an aquatic food chain

DA 23 (1) : 364-5. Food chain consisted of green algae, *Ankistrodesmus falcatus* var. *acicularis* (A. Br.) West; microcrustaceans, *Daphnia magna* Straus; and green sunfish, *Lepomis cyanellus* Rafinesque.

Behnke, R. J. (1962)

F
8-03135

Copeia, (2) : 478-9

The Balkan lake Ohrid and its living world

Re 60-5293.

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8-03136
Polsk. Arch. Hydrobiol., 9 (22) : 9-18
 Charakterystyka limnologiczna jeziora Hańcza (Limnological characteristic of Hańcza Lake). *Pl En Ru*
- Michalski, K. & T. Januszkiewicz** (1961) F
8-03137
Polsk. Arch. Hydrobiol., 9 (22) : 19-35
 Typologiczna ocena lotoku Zagórskiego (Typological characteristic of the Zagórski Stream). *Pl En Ru*
- Stangenberg-Oporowska, K.** F
8-03138
Polsk. Arch. Hydrobiol., 9 (22) : 37-157
 Studia nad chemizmem wód stawów karpowych w Miliczu (Studies on the chemical composition of water in carp ponds in Milicz). *Pl Ru De*
- Moraczewski, J.** (1961) F
8-03139
Polsk. Arch. Hydrobiol., 9 (22) : 159-73
 Wpływ niskiego stanu wody na stopień zanieczyszczenia Wisły w Warszawie (The influence of the low water level on the pollution degree of the river Vistula in Warsaw). *Pl En Ru*
- Klimowicz, H.** (1961) F
8-03140
Polsk. Arch. Hydrobiol., 9 (22) : 195-202
 Daily temperature variations in a small water pool in Cairo
- Chodorowski, A.** (1961) F
8-03141
Polsk. Arch. Hydrobiol., 9 (22) : 287-317
 Niektóre cechy termiczne drobnych zbiorników Puszczy Kampinoskiej w okresie wiosennym (Some chemical and thermal properties of the small pools in the Kampinos Forest in the spring-time). *Pl En Ru*
- Edwards, R. W., M. Owens & J. W. Gibbs** (1961) F
8-03142
J. Instn Wat. Engrs, 15 (5) : 395-405
 Estimates of surface aeration in two streams
 Effect of cobalt concentration and temperature on rate of oxidation of sodium sulphite solution added to sewage effluent and river water studied. Exchange coefficients of two sections of river Pix containing about 50 per cent sewage effluent determined, and effect of drainage water on results discussed. Exchange coefficients of three sections of river Ivel, an unpolluted chalk stream, determined; proposed correction to established methods of calculation for effect of changing oxygen consumption of plants with varying oxygen concentrations outlined.

Klein, L. (1962)

London, Butterworths

River pollution 2: causes and effects

Deals with causes of river pollution, nature of various types of pollution and their effects upon rivers. Fish conservation; problems of sewage and trade wastes.

F
8-03143

Pincus, H. J. (Ed.) (1962)

London, Bailey Bros. & Swinfen Ltd.

Great Lakes basin

Consists of fifteen of the eighteen papers comprising the Symposium on the Great Lakes Basin, held in Dec. 1959, under the aegis of the Geological Society of America. A paper on biological research has been added.

F
8-03144

Armitage, K. B. & H. B. House (1962)

Limnol. & Oceanogr., 7 (1) : 36-41

A limnological reconnaissance in the area of McMurdo Sound, Antarctica

During Antarctic summer 1960-61, limnological data were collected from a series of melt-water ponds and permanently ice-covered lakes in area. No zooplankton was found in any lake, but Ciliata, Rotifera, and Nematoda, Turbellaria and Tardigrada were collected from littoral fauna of melt-water ponds and around edges of lakes Bonney and Vanda.

F
8-03145

Livingstone, D. A. & J. C. Boykin (1962)

Limnol. & Oceanogr., 7 (1) : 57-62

Vertical distribution of phosphorus in Linsley Pond mud

Acid extraction, digestion, and water dilution experiments disclose presence of large quantities of phosphorus in basal third of the sedimentary section from Linsley Pond, Connecticut.

F
8-03146

Dutton, J. A. & R. A. Bryson (1962)

Limnol. & Oceanogr., 7 (1) : 80-97

Heat flux in lake Mendota

Physical processes of heat transfer at lake's surface and internal heat flux are studied for the "average" lake Mendota and for 1958-59. Surface heat budget is determined quantitatively. Details of internal fluxes of heat supplied or lost at surface are discussed, with emphasis on the effects of wind stirring and hydrostatic stability. It is shown that well-known solution to Fourier's heat conduction equation suffices to describe many features of internal temperature range and heat flux when effective thermal diffusivity is introduced. Solution is further used to demonstrate that internal seiche along thermocline causing heat flow in bottom sediments may account for 40% of heat transfer to hypolimnion.

F
8-03147

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USPHS (1962)

Radiol. Hlth Data, 3 (8) : 263-310

Co 62-02446.

FG
8-03148

Likens, G. E. & A. D. Hasler (1962)

Limnol. & Oceanogr., 7 (1) : 48-56

Movements of radiosodium (Na_{24}) within an ice-covered lake

FG
8-03149

Replicated experiments conducted during January 1960 and 1961 in small lake in northwestern Wisconsin. Crushing device described for releasing radioactive solution in deep water. In addition a "portable" scintillation counting system was developed for measuring radioactivity within the lake.

Goldman, C. R. (1962)

Limnol. & Oceanogr., 7 (1) : 99-101

Notes and comments—A method of studying nutrient limiting factors *in situ* in water columns isolated by polyethylene film

FG
8-03150

Ci 61-01699. To supplement *in situ* C^{14} bioassay techniques already described, several large cylinders constructed of translucent polyethylene film. To demonstrate in stratified waters of Castle Lake, California, that thermocline is effective barrier to mixing within open cylinder, and that thermal stratification is not greatly altered by encasement in polyethylene, temperature measurements made with a thermistor inside cylinder are compared with those of the lake.

PLANKTON

Guillard, R. R. L. & J. H. Ryther (1962)

Canad. J. Microbiol., 8 (2) : 229-39

Studies of marine planktonic diatoms—1. *Cyclotella nana* Hustedt, and *Detonula confervacea* (Clève) Gran.

M
8-03151

Bacteria-free clones of *Cyclotella* isolated, 3 from estuarine localities, 1 from continental shelf waters, and 1 from the Sargasso Sea. *Detonula* isolated from Narragansett Bay. Morphology of all clones studied with light and electron microscopes. Vitamin B_{12} requirements. Growth affected by salinity.

Dunbar, M. J. (1962)

J. Mar. Res., 20 (1) : 76-91

The life cycle of *Sagitta elegans* in Arctic and subarctic seas, and the modifying effects of hydrographic differences in the environment

M
8-03152

S. e. arctica of Canadian eastern Arctic waters has life span of two years. Breeding cycle is two-phase, or alternating, and population consists of two distinct groups breeding in different years. Spawning period is long. Hydrographic differences between Hudson Bay, Fox Channel, Ungava Bay and Frobisher Bay, are reflected in biology of *Sagitta*.

Grice, G. D. (1962)
J. Mar. Res., 20 (1) : 97-109

M
 8-03153

Copepods collected by the nuclear submarine 'Seadragon' on a cruise to and from the North Pole, with remarks on their geographic distribution

Brief, non-detailed description is given of an automatic, multiple net plankton sampler used on cruise between N. Atlantic and Pacific Oceans. Copepods in 90 samples identified and relative abundance determined. Most frequently and widely occurring of 18 spp. were *Metridia longa*, *Calanus hyperboreus* and *C. glacialis*. *Pseudocalanus minutus*, found mostly in the Chukchi Sea region, was the most abundant. 6 spp. are recognized as cosmopolites and 12 as Arctic or cold water spp.; of the latter, one is endemic to Arctic and 5 are not known from Pacific.

Alvariño, A. (1962)
Bull. Scripps Instn Oceanogr., 8 (1) : 50 p.

M
 8-03154

Two new Pacific chaetognaths—Their distribution and relationship to allied species

Sagitta scrippsae n. sp.: diagnosis, nervous system, stages of maturity, food, relations among the different spp. of chaetognaths, problems of systematics, pattern of distribution, vertical distribution, distribution of related spp. *Eukrohnia bathypelagica* n. sp.: diagnosis, taxonomic problems, distribution.

Cassie, V. (1961)
Bot. mar., 2 (Suppl.) : 54 p.

M
 8-03155

Marine phytoplankton in New Zealand waters. Fr Es De

Taxonomy; ecology; general surface hydrological features; sampling localities; methods; spp. list; notes on individual spp.; regional significance of New Zealand phytoplankton; list of stations, table of spp. and occurrence. In samples collected between sea surface and 20 metres' depth off the New Zealand coastline in the period 1957 to 1959, 240 spp., incl. 198 phytoplankters, have been identified. 23 localities have been grouped according to (a) current and (b) environment.

Sukhanova, I. N. (1962)
Dokl. Akad. Nauk SSSR, 142 (5) : 1162-4

M
 8-03156

O tropicheskom fitoplanktone Indiiskogo okeana (On tropical phytoplankton of the Indian Ocean, from fish-net data)

Hansen, P. G. & E. G. Barham (1962)
Limnol. & Oceanogr., 7 (1) : 8-13

M
 8-03157

Resonant cavity measurements of the effects of "red water" plankton on the attenuation of underwater sound

During summer 1958, a "red water" bloom caused by the dinoflagellate, *Gonyaulax polyedra*, occurred off San Diego, California. Using resonant cavity instrumentation, high attenuations were measured at sea and repeated in laboratory with collected samples. Mechanism of sound absorption might be related to gaseous metabolic by-products of planktonic organisms.

- Gunnerson, C. G. & K. O. Emery** (1962) M
8-03158
Limnol. & Oceanogr., 7 (1) : 14-20
 Suspended sediment and plankton over San Pedro Basin, California

Distribution of sediment and plankton throughout upper 275 m observed on four cruises in 1957-58. Evidence of entrainment and subsequent sinking of plankton with suspended sediment suggests turbidity currents originating within upper 50 m on continental shelf.

- Lacroix, G. & P. Morisset** (1962) M
8-03159
Cah. Inform. Sta. Biol. mar. Grande-Rivière, (14), 33-9
 Observations sur les migrations verticales de *Sagitta elegans* Verrill (Observations on the vertical migrations of *Sagitta elegans* Verrill)

Observations in 1957 over two 24-hour periods in Grande-Rivière region, Quebec.

- Silva, E. De Sousa e** (1962) M
8-03160
Notas Estud. Inst. Biol. marit., (24) : 75-100
 Some observations on marine dinoflagellate cultures—2. *Glenodinium foliaceum* Stein and *Goniaulax diacantha* (Meunier) Schiller. Fr Es De

Co 8-03203. Considers morphological aspects observed in the development of the spp.

- Sushchenia, L. M.** (1962) M
8-03161
Dokl. Akad. Nauk SSSR, 143 (5) : 1205-7
 Kolichestvennyye dannye i pitanii i balans energii *Artemia salina* (L.) (Quantitative data on the nutrition and energy balance in *Artemia salina* (L.))

- Sorokin, Iu. I.** (1962) M
8-03162
Dokl. Akad. Nauk SSSR, 144 (4) : 914-7
 Produktsiia fotosinteza fitoplanktona v Chernom more (Photosynthesis produce of phytoplankton in the Black Sea)

- Brodskii, K. A.** (1962) M
8-03163
Dokl. Akad. Nauk SSSR, 142 (6) : 1416-9
 Opyt biometricheskogo analiza morfologicheskoi izmenchevosti *Calanus pacificus* Brodsky (Kopepoda) (An attempt at a biometric analysis of morphological variation in *Calanus pacificus* Brodsky)

- Sorokin, Iu. I.** (1962) M
8-03164
Dokl. Akad. Nauk SSSR, 145 (1) : 192-4
 Vertikal'noe raspredelenie saprofitnykh bakterii v vodnoi tolshche tsentral'noi chasti Tikhogo okeana (Vertical distribution of saprophytic bacteria within the water layers of the central part of the Pacific Ocean)

- Brodskii, K. A.** (1962) M
8-03165
Dokl. Akad. Nauk SSSR, 143 (3) : 709-12

Areally massovykh vidov roda *Calanus* Iuzhnogo polushariia (Distribution of mass species of the *Calanus* genus over the south hemisphere)

- Korotkevich, V. S.** (1962) M
8-03166
Dokl. Akad. Nauk SSSR, 144 (3) : 669-71

Novye dannye k voprosu o proiskhozhdenii pelagicheskikh nemertin (Recent data on the origin of pelagic Nemertini)

- Grainger, E. H.** (1962) M
8-03167
J. Fish. Res. Bd Can., 19 (3) : 377-400
Zooplankton of Foxe Basin in the Canadian Arctic

Collections from 100 stations in basin and adjacent waters of eastern Arctic, made in 1955, 1956 and 1957, are considered. Available information on physical oceanography of region is discussed, especially factors with apparent direct relationship to plankton distribution. Zooplankton standing crop on two sides of Foxe Basin is estimated, and related to water movement, depth, ice cover and turbidity. Forty-eight species of zooplankton are recorded. It is concluded that basin is region of opposed arctic and subarctic elements. Differences in zooplankton development in different years are related in part to variations in duration of ice cover.

- Caldwell, D. K. & C. R. Carlin** (1962) MG
8-03168
Copeia, (2) : 445-6

A photomicrographic adapter for stereomicroscopes useful in photographing fish larvae

During biological inventory of waters off the southeastern United States, conducted by the US Bureau of Commercial Fisheries, became necessary to make photographs of larval fishes collected in plankton tows. Stereomicroscope was most suitable instrument, modified device suggested by Mr. H. R. Bullis, Jr., of the US Bureau of Commercial Fisheries, which provides a simple adapter for mounting a single-lens reflex camera directly to one eyepiece barrel.

- Wood, E. J. F.** (1962) MG
8-03169
Limnol. & Oceanogr., 7 (1) : 32-5

A method for phytoplankton study

Method for quantitative and qualitative investigations of phytoplankton which can be employed at sea on fresh material is described. Samples are collected in van Dorn type samplers, centrifuged and examined under fluorescence microscope. Phytoplankton is counted by taking advantage of red autofluorescence of chlorophyll and total organisms by the Strügger technique using the induced fluorescence of acridine orange. Total particles—leptopel—can be counted by ordinary light using same equipment. A Petroff Hausser bacterial counter is used. Qualitative examinations are made on same material after sedimentation, using a special cell to minimize effect of ship's motion.

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Steele, J. H. & I. E. Baird (1962)

MG
8-03170

Limnol. & Oceanogr., 7 (1) : 42-7

Further relations between primary production, chlorophyll, and particulate carbon

Productivity of a sea loch, Loch Nevis, on west of Scotland, is estimated from nitrate and phosphate data. Chlorophyll *a* and particulate organic carbon data are used to study possible carbon : chlorophyll ratios in plants. For northern North Sea, carbon and chlorophyll samples during the spring flowering provide an estimated value of 23 : 1 for the carbon : chlorophyll ratio under very favourable conditions for growth. Possible causes of differences between the carbon : chlorophyll ratios for Loch Nevis and North Sea are discussed.

Patten, B. C. (1962)

MF
8-03171

J. Mar. Res., 20 (1) : 57-75

Species diversity in net phytoplankton of Raritan Bay

Annual diversity cycle is described, using entropy-related diversity indices. Theory of diversity change during succession is developed. Diversity levels in estuary increased downbay in association with diminishing pollution, and spatial pattern was strikingly related to general patterns of water mass circulation.

Hood, D. W. & K. Park (1962)

MF
8-03172

Physiol. Plant., 15 (2) : 273-82

Bicarbonate utilization by marine phytoplankton in photosynthesis

Pure cultures of *Nitzschia closterium*, *Platymonas* sp., fresh water and marine *Chlorella* sp. grown in laboratory were used for investigation.

Griffith, R. E. (1961)

MF
8-03173

Contr. Chesapeake biol. Lab., (172) : 79 p.

Phytoplankton of Chesapeake Bay—An illustrated guide to the genera

Key to genera; ill. description of spp. in each family; glossary and annotated bibliography; index.

Lindquist, A. (1961)

MF
8-03174

Rep. Inst. mar. Res. Lysekil, (13) : 124 p.

Untersuchungen an *Limnocalanus* (Copepoda, Calanoida) (Investigations on *Limnocalanus* (Copepoda, Calanoida))

Review of biology, ecology of *L. macrurus* and *L. grimaldii* with special reference to Baltic estuaries.

Sanders, H. L. et al. (1962)

MF
8-03175

Limnol. & Oceanogr., 7 (1) : 63-79

A study of the intertidal fauna of Barnstable Harbor, Massachusetts

Intensive investigation of six localities on intertidal flats during summer of 1959. Less detailed study on same stations during summer 1960. 82 spp. were collected during two-years period. Stomach contents of 234 individuals representing 36 spp. Observations were made on the natural history of three dominant spp., *Gemma gemma*, *Clymenella torquata* and *Glycera dibranchiata*.

Steele, J. H. & I. E. Baird (1962)

MF
8-03176

Limnol. & Oceanogr., 7 (1) : 101-2

Notes and comments—Carbon-chlorophyll relations in cultures

Ci 61-11653. Previous paper described possible variations in the chlorophyll:carbon ratio of phytoplankton in the sea. Suggested that low ratios might correspond to slow growth rates imposed by nutrient limitation. To observe effect in more detail, and comparison with ecological results, experiments were carried out using same analytical techniques as were employed in the sea sampling.

Frolander, H. F. & J. Pratt (1962)

MF
8-03177

Limnol. & Oceanogr., 7 (1) : 104-6

Notes and comment—A bottom skimmer

Attempts to tow sampling nets very close to ocean or lake bottoms usually result in hauls of too short duration to obtain enough specimens, because of danger of lost or damaged equipment, or accidental sampling of quantities of bottom sediment through improper combinations of cable length, wire angle, and uneven bathymetry. Dredging attempts to secure these organisms usually yield relatively few of the desired specimens mixed with large quantities of bottom sediments. In recent attempts to secure quantities of newly settled meroplanktonic forms, as well as spp. that normally live on the bottom, use has been made of a towed, bottom-skimming sled equipped with a suitable collecting net.

Smirnov, A. N. (1962)

MF
8-03178

Dokl. Akad. Nauk SSSR, 144 (3) : 656-8

O vliianii biogennogo stoka Dona i solenosti na razvitie zooplanktona v Taganrogskom zalive Azovskogo moria (The effect of biogenic run-off of the Don River and of salinity on the development of zooplankton in the Taganrog Bay of the Azov Sea)

F

8-03179

Beyers, R. J. (1962)

Thesis, Univ. of Texas, 190 p.

The metabolism of twelve aquatic laboratory microecosystems

DA 23 (1) 359. Basic properties of metabolism of balanced ecosystems studied using microcosm method. For over two years 12 freshwater laboratory microecosystems were kept in a constant temperature room under uniform conditions. Approximately one month after seeding with materials from a constant temperature spring the microecosystem metabolism established a steady state. Diurnal curves of respiration and photosynthesis were measured under experimental conditions which concerned overgrazing, temperature and photoperiod. Principal primary producers present were *Vallisneria* and *Oedogonium*, while the main animal biomass was made up of *Physa* and a burrowing oligochaete worm (*Sutroa*?).

F

8-03180

Erman, L. A. (1962)*Dokl. Akad. Nauk SSSR*, 144 (4) : 926-9

Pitanie i razmnzhenie planktonnykh kolovratok *Brachionus calyciflorus* Pall. v massovykh kulturakh (Nutrition and reproduction of *Brachionus calyciflorus* Pall. plankton in mass cultures)

F

8-03181

Ivanova, M. B. (1962)*Dokl. Akad. Nauk SSSR*, 145 (2) : 432-5

K voprosu o vertikal'nykh sutochnykh migratsiiakh planktonnykh Copepoda v gumifitsirovanom ozere (Vertical 24-hour migrations of planktonic Copepoda in humified lakes)

F

8-03182

Lund, J. W. G. (1962)*J. Fish. Res. Bd Can.*, 19 (3) : 501-4The periodicity of *Melosira islandica* O. Müll. in Great Slave Lake

Before his death, Professor D. S. Rawson asked author to examine samples of net plankton from certain Canadian lakes and discussed their qualitative composition.

BENTHOS

M

8-03183

Ahearn, D. G., F. J. Roth, Jr. & S. P. Meyers (1962)*Canad. J. Microbiol.*, 8 (1) : 121-32A comparative study of marine and terrestrial strains of *Rhodotorula*

Yeasts of the genus obtained from subtropical marine environments classified by comparing them critically with type and authentic cultures. No distinctive metabolic differences ascribable to environmental influence were observed in comparing marine and terrestrial isolates. Identifications of spp. based on requirements for vitamins, ability to assimilate selected carbohydrates, and capacity to utilize nitrate nitrogen.

- M
8-03184
- Southward, E. C.** (1962)
Canad. J. Zool., 40 (3) : 385-9
 A new species of *Galathealimum* (Pogonophora) from the Canadian Arctic
 Description of *G. arcticum* sp. nov.

- M
8-03185
- Hwang, J. C.-C.** (1962)
 Thesis, Univ. of Oregon, 83 p.
 The functions of some sensory neurons in the pereopods of the crab *Cancer magister*
 DA 23 (1) : 281-2.

- M
8-03186
- Simpson, M.** (1961)
 Thesis, The Catholic Univ. of America, 55 p.
 Reproduction of the polychaete *Glycera dibranchiata* at Solomons, Maryland
 DA 23 (1) : 367.

- M
8-03187
- Dawes, C. J., F. M. Scott & E. Bowler** (1961)
Amer. J. Bot., 48 (10) : 925-34
 A light- and electron-microscopic survey of algal cell walls—1. Phaeophyta and Rhodophyta

The structure of the thalli of the Phaeophyta and Rhodophyta is compared, and the occurrence of intercellular spaces, pitting, and microfibrillar patterns is discussed. A detailed comparison of the cell-wall structure and growth of a brown alga, *Dictyota flabellata*, and of a red alga, *Helminthocladia californica*, is also presented.

- M
8-03188
- Anon.** (1962)
New Scient., 15 (305) : 628
 Trends and discoveries—Missing algae found

Botanists in Swedish 'Sunbeam' returned from Sardinia with samples of *Bertholdia neopolitana*, algae discovered in the 1880s but since looked for in vain.

- M
8-03189
- Shewan, J. M.** (1962)
Nature, Lond., 195 (4843) : 743
 Deep-sea microbiology

Re 62-05175.

- Coughlan, J.** (1962) M
8-03190
Nature, Lond., 195 (4843) : 831-2
 Chain formation by *Phaeodactylum*

P. tricornutum (Bohlin) is a small marine diatom, with unexacting growth requirements. Rate of growth in relation to nutrition and environmental conditions has been widely studied in unialgal and bacteria-free culture, as well as in mass culture. Spp. also extensively cultured as food for rearing marine larval forms and filter-feeding invertebrates. Speculation has centred on its taxonomic position. During routine examination of cultures, it was found that *Phaeodactylum* had successfully invaded a declining culture of *Isochrysis galbana* (Parke) and was present as curved chains as well as single cells.

- Cohen, D. M.** (1962) M
8-03191
Copeia, (1) : 239
 Reviews and comments
 Re 61-03632.

- Eppley, R. W.** (1962) M
8-03192
Physiol. Plant., 15 (2) : 246-51
 Hydrolysis of polyphosphates by *Porphyra* and other seaweeds

P. perforata J. G. Agardh and other intertidal seaweeds were collected locally, California.

- Boilly, B.** (1962) M
8-03193
C.R. Acad. Sci., Paris, 255 (11) : 1414-6
 Inhibition de la régénération caudale par irradiation X chez *Syllis amica* Quatrefages (annélide polychète) (Inhibition of caudal regeneration in *Syllis amica* Quatrefages (annelid polychaete) by X radiation)

- Domantay, J. S.** (1961) M
8-03194
Philipp. J. Sci., 90 (2) : 271-95
 An ecological survey of the marine vegetation of the Hundred Islands and vicinity

Noted different types of habitats with different forms of vegetation. Muddy bottoms found to be almost exclusively of phanerogamic spp. of genera *Posidonia*, *Thalassia*, *Diplanthera*, *Enhalus*, *Cymodocea* and *Halophila*. A few cryptogamic forms like *Halicoryne wrightii*, *Neomeris vanbossae*, *Bornetella oligospora* and *B. sphaerica* were also noted in the same habitat attached to coral and other hard substrata. In partly sandy-muddy bottoms, dominant forms were *Halimeda opuntia*, *Posidonia* and a few others. Brown and red algae with some green forms of genera *Caulerpa*, *Valonia*, *Halimeda*, inhabited sandy-rocky and coral reefs.

- M
8-03195
- Barnes, H. & D. M. Finlayson** (1962)
Limnol. & Oceanogr., 7 (1) : 98
Notes and comment—Presence of ascorbic acid in cirripede semen
Presence in seminal plasma and centrifuged spermatozoa of *Balanus balanus*.
- M
8-03196
- Roginskaia, I. S.** (1962)
Dokl. Akad. Nauk SSSR, 146 (2) : 488–91
Biologiya razmnozheniia i razvitiia *Cuthona pustulata* (G., N.) (The biology of propagation and development of *Cuthona pustulata* (Gastropoda, Nudi-branchia))
- M
8-03197
- Buznikov, G. A. & B. N. Manukhin** (1962)
Dokl. Akad. Nauk SSSR, 144 (6) : 1414–7
Tormoziashee veshchestvo embrionov molliuskov i ego rol' v reguliatsii embrional'noi motoriki (An "inhibitory substance" in mollusk embryos, and its role in the control of embryonic motoricity)
- M
8-03198
- Pakhomova, M. V. & G. P. Serenkov** (1962)
Dokl. Akad. Nauk SSSR, 144 (6) : 1390–3
Izuchenie nukleotidnogo sostava RNK zelenoi vodoroslei *Dunaliella salina* (A study of the nucleotid composition of RNA in the green alga *Dunaliella salina*)
- M
8-03199
- Ivanov, A. I.** (1962)
Dokl. Akad. Nauk SSSR, 144 (4) : 911–3
Kolichestvennoe raspredelenie molliuskov roda *Modiolus* (*M. phaseolina* Phil. i *M. adriatica* Lam.) u kavkazskikh beregov Chernogo moria (The quantitative distribution of Mollusca of the genus *Modiolus* (*M. phaseolina* Phil. and *M. adriatica* Lam.) near the Caucasian coast of the Black Sea)
- M
8-03200
- Sokolova, M. N. & F. A. Pasternak** (1962)
Dokl. Akad. Nauk SSSR, 144 (3) : 645–8
Kolichestvennoe raspredelenie donnoi fauny v severnoi chasti Araviiskogo moria i v Bengal'skom zalive (Quantitative distribution of bottom fauna in the northern part of the Arabian Sea and in the Bengal Bay)
- M
8-03201
- Dzhamusova, T. A.** (1962)
Dokl. Akad. Nauk SSSR, 145 (1) : 189–91
Issledovanie funktsional'nykh izmenenii myshechnoi tkani *Neptunea eulimata* Dall (M.) pri dlitel'nom temperaturnom vozdeistvii (A study of functional variations of muscular tissue in the mollusk *Neptunea eulimata* Dall exposed to prolonged thermal treatment)

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McCrimmon, H. & J. Bray (1962)

M
8-03202

J. Fish. Res. Bd Can., 19 (3) : 489-96

Observations on the isopod *Mesidotea entomon* in the western Canadian Arctic Ocean

Collection during 1960 cruise of 'Salvelinus' has expanded recorded distribution of spp. Population densities were highest in mud-bottomed areas. No specimens collected at depths greater than 24 fathoms. Sexual dimorphism.

Silva, E. de Sousa (1959)

MF
8-03203

Notas Estud. Inst. Bio. marit., (21) : 15 p.

Some observations on marine dinoflagellate cultures—1. *Prorocentrum micans* Ehr. and *Gyrodinium* sp.

Study of toxicity of the spp. in pure culture.

Hill, E. P. (1962)

MF
8-03204

Thesis, Univ. of Nebraska, 56 p.

Some effects of hydrostatic pressure on growth and mitochondria of *Allomyces macrogynus*

DA 23 (1) : 40. Action of pressure, subjected at increments of 1, 200, 400, 600 and 1,000 atmospheres on sporophyte of aquatic phycomycete.

Klekowski, R. Z. (1961)

MF
8-03205

Polsk. Arch. Hydrobiol., 9 (22) : 383-406

Survival of *Planorbis planorbis* (L.) and other snails in diluted sea-water and during the following desiccation

Parke, M. & G. T. Boalch (1962)

MF
8-03206

Nature, Lond., 195 (4838) : 212

The algae

Re 62-02529.

Fretter, V. & A. Graham (1962)

MF
8-03207

London, Ray Soc., 755 p.

British prosobranch molluscs—Their functional anatomy and ecology

Introductory account of Mollusca followed by a general description of *Littorina littorea* as a typical prosobranch. Chapters dealing with functional morphology, from shell and mantle cavity to reproductive system and the formation of spawn. Description of development and of larval forms. 3rd section deals with ecology and is concerned with the limpets, whelks and tingle and other prosobranchs of rocky shores, with those of other marine habitats, with prosobranch inhabitants of brackish and fresh-waters and of the land, and finally with parasites of these animals.

BENTHOS

Yonge, C. M. (1962)
Nature, Lond., 195 (4843) : 740-1
 British prosobranchs

MF
 8-03208

Re 8-03207.

Gould, S. W. (1962)
 New Haven, 111 p
 Family names of the plant kingdom—Vol. 1

MF
 8-03209

1st volume of I.P.Ix, giving account of project—with details of card design—involving assignment of code numbers to all plant taxa and synonyms. Later volumes will give codes to genera, and spp. and varieties. Present volume gives lists in systematic and alphabetic order, of orders and Rigler taxa, operative families, synonyms, bibliography, authors; with specimen sheets for future bibliography of genera, and authors arranged by publications. [The codes here given will eventually be adopted instead of the present codes for plant groups for indexing the *Curr. Bibliogr. aquat. Sci. Fish.*]

Anon. (1962)
New Scient., 16 (307) : 29
 Science in British industry—Fighting *Spartina*

MF
 8-03210

S. townsendii sown to stabilize tidal flats is spreading in England and choking waterways. Note on herbicide tests.

Greenberg, M. J. & D. A. Windsor (1962)
Science, 137 (3529) : 534-5
 Action of acetylcholine on bivalve hearts

MF
 8-03211

Isolated hearts of comprehensive selection of bivalves tested to determine distribution of excitator and depressor effects of acetylcholine. Some intra-family uniformity of response exists. Genera studied incl. *Mytilus*, *Pecten*, *Crassostrea*, *Mercenaria*, *Tapes*, *Clinocardium*, *Solen*, *Anodonta*, *Mya*.

Kindel, P. K. (1962)
 Thesis, Cornell Univ., USA, 134 p.

F
 8-03212

Incorporation of C¹⁴ labeled compounds into the polysaccharides of *Chlorella pyrenoidosa* and *Anacystis nidulans* in dark and in light

DA 23 (1) : 56.

Bushnell, J. H., Jr. (1961)
 Thesis, Michigan State Univ., 323 p.

F
 8-03213

The Bryozoa of Michigan: taxonomy, ecology and distribution (Part 1). Growth, mortality, and longevity of *Plumatella repens* (Part 2)

DA 23 (1) : 360.

- Shafer, J., Jr., J. E. Baker & J. F. Thompson** (1961) F
8-03214
Amer. J. Bot., 48 (10) : 896-9
 A *Chlorella* mutant lacking nitrate reductase
- Following ultraviolet irradiation of *C. pyrenoidosa*, a mutant was isolated which could not utilize nitrate nitrogen but which could use nitrite, ammonia and some organic nitrogen compounds.
- Klimowicz, H.** (1961) F
8-03215
Polsk. Arch. Hydrobiol., 9 (22) : 203-21
 Rotifers of the Nile canals in the Cairo environs
- Klimowicz, H.** (1961) F
8-03216
Polsk. Arch. Hydrobiol., 9 (22) : 223-42
 Differentiation of rotifers in various zones of Nile near Cairo
- Madaliński, K.** (1961) F
8-03217
Polsk. Arch. Hydrobiol., 9 (22) : 243-63
 Moss dwelling rotifers of Tatra streams
- Chodorowska, W.** (1961) F
8-03218
Polsk. Arch. Hydrobiol., 9 (22) : 265-85
 Free-living Nematoda fauna in small pools of the Kampinos forest
- Moraczewski, J.** (1961) F
8-03219
Polsk. Arch. Hydrobiol., 9 (22) : 175-94
Testacea du littoral peu profond du lac Kisajno (région des lacs de Mazurie)
 (*Testacea* of the shallow littoral of Kisajno Lake—Masurian lakes)
- Fischer, E.** (1961) F
8-03220
Polsk. Arch. Hydrobiol., 9 (22) : 319-47
 Próba charakterystyki mikrobiologicznej jednego z drobnychz biorniókw okolic Warszawy w okresie zimowym (Attempt of the microbiological characteristic of a small pond in Warsaw environs in winter season).
 En Ru
- Czczuga, B.** (1961) F
8-03221
Polsk. Arch. Hydrobiol., 9 (22) : 349-60
 Intensywność rozmnażania się i produkcja bakterii jezior Rajgrodzkich w okresie letnim (Intensity of multiplication and production of bacteria in Rajgrodzkie lakes in summer). *Pl* En Ru
- Klekowski, R. Z.** (1961) F
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Polsk. Arch. Hydrobiol., 9 (22) : 361-81
 Gas compression in the lungs of desiccating snails *Coretus corneus* L. and *Limnaea stagnalis* (L.)

- F
8-03223
- Gilchrist, B. M. & J. Green** (1962)
Nature, Lond., 195 (4844) : 905-7
 Carotenoid pigments in Rotifera

Dense population of *Philodina roseola* Ehrb. was found in a dish in which *Chirocephalus diaphanus* was being cultured. The rotifers formed dense pink patches on the sides of the dish, and when these patches were scraped off with a clean scalpel they were found to consist of thousands of individuals, with even greater numbers of pink eggs. Carotenoid pigments were extracted.

- F
8-03224
- Treharne, R. W. & H. C. Eyster** (1962)
Biochem. biophys. Res. Commun., 8 (6) : 477-80

Electron spin resonance study of manganese and iron in *Chlorella pyrenoidosa*

- F
8-03225
- Treharne, R. W. & L. P. Vernon** (1962)
Biochem. biophys. Res. Commun., 8 (6) : 481-5

Light saturation studies on the electron spin resonance signals observed with *Chlorella pyrenoidosa*

- F
8-03226
- Anon.** (1962)
Limnol. & Oceanogr., 7 (1) : 109

Notes and comments—Glaciers and winter stoneflies

Note on project of Dr. H. H. Ross and Dr. W. E. Ricker on relationships and distribution of adult winter stoneflies in an effort to deduce the living conditions south of the advancing and retreating glaciers in eastern North America. Data required are name of stream, locality, date and collector.

- F
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- Fedorov, V. D.** (1962)
Dokl. Akad. Nauk SSSR, 144 (6) : 1380-3

O zakonomernosti otmiraniia kletok v razmnozhaiushchikhsia kul'turakh sinezelenykh vodoroslei *Anabaena variabilis* i *Amorphonostoc punctiforme* (On the regularity underlying the dying-off of cells in multiplying cultures of blue-green algae *Anabaena variabilis* and *Amorphonostoc punctiforme*)

- FG
8-03228
- Clatworthy, J. N. & J. L. Harper** (1962)
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The comparative biology of closely related species living in the same area—
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X
8-03325

Tarr, H. L. A. & M. Leroux (1962)
J. Fish. Res. Bd Can., 19 (3) : 519-20

A note concerning the origin and quantitative distribution of acid-soluble phosphorus compounds and free sugars in fish muscle

X
8-03326**Dussault, H. P.** (1962)*J. Fish. Res. Bd Can.*, 19 (3) : 437-44

Enumeration of coliform bacteria in light salted fish brines

AQUATIC STOCKS

M
8-03327**Dawson, C. E.** (1962)*Copeia*, (2) : 330-6A new gobioid fish, *Microdesmus lanceolatus*, from the Gulf of Mexico with notes on *M. longipinnis* (Weymouth)

New sp. of Microdesmidae described from off coast of Louisiana. Morphological variation in *M. longipinnis*, only known congener in Gulf, is ill. Key given to Atlantic spp. Evidence presented to establish family among the gobioid fishes rather than among the blennoids. Incl. of genus in Gunnelichthyidae is considered untenable.

M
8-03328**Caldwell, D. K.** (1962)*Copeia*, (2) : 417-24

Western Atlantic fishes of the family Priacanthidae

Key based on meristics, presented for the 4 spp.: *Pseudopriacanthus altus* (Gill), *Priacanthus cruentatus* (Lacépède), *Priacanthus arenatus* Cuvier, and *Cookeolus boops* (Bloch & Schneider). Geographical ranges are noted and systematic and ecological comments incl.

M
8-03329**Briggs, J. C.** (1962)*Copeia*, (2) : 424-5A new clingfish of the genus *Lepadichthys* from the New Hebrides

L. bolini is described. This makes 5 known spp. in genus, all confined to tropical waters of Indo-West Pacific. Artificial key to genus is presented.

M
8-03330**Springer, V. G.** (1962)*Copeia*, (2) : 426-33A review of the blennioid fishes of the genus *Ophioblennius* Gill

Review indicates presence of 2 spp. each represented by 2 sub-spp. *O. s. steindachneri* is widespread in the eastern Pacific from California to Peru but absent from Clipperton Island where a new endemic sub-sp. *O. s. clipper-tonensis* is described. *O. a. atlanticus* is known from the west coast of Africa and adjacent islands to eastern coast of Brazil. *O. a. macclurei* is widespread in the Caribbean Atlantic.

AQUATIC STOCKS

- Briggs, J. C.** (1962) M
8-03331
Copeia, (2) : 440
 Restoration of the frogfish, *Antennatus reticularis* (Gilbert)

Ci 582770. In attempting to identify some eastern Pacific frogfishes in the Stanford Natural History Museum, two Gulf of California specimens of *Antennatus* found to differ from those of localities farther south.

- Ward, J. W.** (1962) M
8-03332
Copeia, (2) : 440-2
 Description of the eyes of a blind specimen of the red drum, *Sciaenops ocellata*

Ci 29-2244BO. Fish taken in Alazan Bay, south Texas, by a commercial fisherman in June 1955. Undissected general features of the whole fish previously described and figured.

- Dawson, C. E.** (1962) M
8-03333
Copeia, (2) : 442-4
 New records and notes on fishes from the north-central Gulf of Mexico

Notes on spp. of *Neoconger*, *Rypticus*, *Fistularia*, *Steindachneria*, *Abudefduf*, *Conodon*, *Pomacentrus*, *Canthidermis*, *Amanes*, *Xanthichthys*.

- Pounds, S.** (1962) M
8-03334
Copeia, (2) : 444-5
 An unusually large lockdown, *Selene vomer*, from Texas

Specimen caught from jetty at Port Aransas by fisherman using a rod and reel, in August 1961. Measured total length 483 mm, weighed 3 pounds 4 ounces.

- Scattergood, L. W.** (1962) M
8-03335
Copeia, (2) : 446-7
 White sharks, *Carcharodon carcharias*, in Maine, 1959-60

Sp. has reputation of being dangerous to man. Paper presents 12 records of white sharks caught along the Maine coast. Eight captures in 1960 represent the greatest number recorded for any one year along the US Atlantic coast. Number can be attributed in part to the publicity given to shark captures. Also reviews previous occurrences and discusses confusion by fishermen, with *Lamna nasus* and *Isurus oxyrinchus*.

- Hazlett, B. & H. E. Winn** (1962) M
8-03336
Copeia, (2) : 447-9
 Sound producing mechanism of the Nassau grouper, *Epinephalus striatus*

Ci 583670. Effort was made at the Bermuda Biological Station during summer 1961 to clarify the origin of sound. Describes laboratory experiments indicating that single bilateral muscle and intact air bladder comprise the sound mechanism.

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Jones, R. S. (1962)
Copeia, (2) : 453

M
8-03337

A new spawning area for *Istiophorus albicans* and the capture of two post-larval istiophorids from the Texas coast

Location of new spawning and subsequent capture of 2 postlarval specimens of family near breeding swarm has contributed additional data to life history and distribution of these fishes. Large number of adults taken during the annual fishing tournament at Port Aransas—12-13 Jul. 1961.

Miller, D. & R. R. Marak (1962)
Copeia, (2) : 454-5

M
8-03338

Early larval stages of the fourspot flounder, *Paralichthys oblongus*

Eggs obtained by artificially spawning ripe male and female specimens taken off Point Judith, Rhode Island, on 9 Jul. 1958. After fertilization, were brought to Bureau of Commercial Fisheries' Biological Laboratory at Woods Hole, where they were allowed to develop.

Vorenberg, M. M. (1962)
Copeia, (2) 455-6

M
8-03339

Cannibalistic tendencies of lemon and bull sharks

Lake Worth, a salt water estuary of the southeastern coast of Florida, frequented in its lower reaches by *Negaprion brevirostris* and *Carcharhinus leucas*. Author notes observations of cannibalism when fishing for them with live-bait.

Boschung, H. T., Jr. & J. Couch (1962)
Copeia, (2) : 456-7

M
8-03340

A record of the sand shark, *Carcharias taurus*, off Pensacola, Florida

Common in summer fauna of mid-Atlantic coast of the US and Canada, infrequently reported in Gulf of Mexico north and west of Clearwater, Florida. On 1 Apr. 1961 a male speared by J. Couch while scuba diving over a sunken freighter 8 miles off the west end of Santa Rosa Island, Florida.

Essapian, F. S. (1962)
Copeia, (2) : 457-9

M
8-03341

Notes on the behavior of sharks in captivity

Observations recorded pertain to *Carcharias taurus*, *Ginglymostoma cirratum*, *Carcharhinus leucas*, *Eulamia milberti*, *Negaprion brevirostris* and *Galeocerdo cuvier*. Chiefly made at Miami's Seaquarium, but writer also observed the behavior of marine animals at Marine Studios, Marineland, Florida, from 1949 to 1955.

- Breder, C. M., Jr.** (1962) M
8-03342
Copeia, (2) : 459-62

Effects of a hurricane on the small fishes of a shallow bay

Ci 61-12254. Catches by traps of Breder at Lemon Bay, Florida, Gulf of Mexico, before, during and after hurricane "Donna", 10 Sep. 1960.

- Mees, G. F.** (1962) M
8-03343
Copeia, (2) : 462

Occurrence of internal nares in the genus *Ichthyoscopus* (Pisces, Uranoscopidae)

Checked Uranoscopidae in the collection of Western Australian Museum, and found that internal nares are present in *I. spinosus*, *I. barbatus* and *I. insperatus*. Position of nares as described by Atz for *Astroscopus guttatus*. 2 spp. of *Kathetostoma*, *K. laevis* and *K. nigrofasciatum*, also examined, but no internal nares were found.

- Scattergood, L. W.** (1962) M
8-03344
Copeia, (2) : 462

First record of mako, *Isurus oxyrinchus*, in Maine waters

Specimens with estimated weight of 400 to 450 pounds harpooned Jul. 1957 off Boon Island, York County, by commercial fishermen. With this identification, western Atlantic range of *I. oxyrinchus* is extended northwards to the southeastern coast of Maine.

- Boyar, H. C.** (1962) M
8-03345
Copeia, (2) : 463-5

Blood cell types and differential cell counts in Atlantic herring, *Clupea harengus harengus*

Gulf of Maine and Bay of Fundy herring are difficult to age with usual methods, and new approaches are being tried. One is to determine if qualitative and/or quantitative differences in blood cells are discernible in herring of different lengths. This note describes various cell types and their frequency of occurrence in three length groups.

- Caldwell, D. K.** (1962) M
8-03346
Copeia, (2) : 467-8

An announcement of specimens available as types for the istiophorid fishes *Istiompax marlina* and *Istiophorus greyi*

Note announces existence of one specimen available as a type for each of 2 apparently valid spp. described as new in Jordan & Evermann 1926. While mounted and subject to the whims of the taxidermist, the 2 specimens do serve as more positive criteria for future systematic comparisons than the photographs of the entire fishes used in that paper. Both now in collections of the Los Angeles County Museum.

- Talbot, F. H. & J. J. Penrith** (1962) M
8-03347
Copeia, (2) : 468
 Spearing behavior in feeding in the black marlin, *Istiompax marlina*

Ci 580921. On 27 Jan. 1961, *I. marlina* (Jordan & Hill), 580 pounds in weight, taken by Japanese long-line, west of the Cape Peninsula, S. Africa. Had swallowed whole a 75-pound *Thunnus albacores*.

- Deubler, E. E., Jr. & J. C. White, Jr.** (1962) M
8-03348
Copeia, (2) : 468-9
 Influence of salinity on growth of postlarvae of the summer flounder, *Paralichthys dentatus*

Ci 59-2077 and 583187. Presents results of a brief study under laboratory conditions. Postlarvae were collected from surface waters of Bogue Sound at Morehead City, North Carolina, in Feb. 1961, following method of 583187.

- Scheline, R. R.** (1962) M
8-03349
Nature, Lond., 195 (4844) : 904-5
 O-methylation in fish

During investigation of fate of some foreign organic compounds in fish, metabolism of 3,4-dihydroxyphenylacetic acid (homoprotocatechuic acid) was investigated with the purpose of obtaining some information on methylation reactions in *Gadus callarias*.

- Gulland, J. A. & G. R. Williamson** (1962) M
8-03350
Nature, Lond., 195 (4844) : 921
 Transatlantic journey of a tagged cod

Although *Gadus morhua* population in North Atlantic form more or less discrete stocks, many tagged cod have travelled long distances, for example, between Iceland and Greenland, from Iceland to the Faeroes, and the Faeroes to the North Sea, and from Bear Island to Iceland and Greenland. Tag, which had been attached to a cod caught in central North Sea on 9 Jun. 1957, was recovered on 7 Dec. 1961. Fish had grown from 57 cm total length when tagged to 75 cm when recaptured.

- Postel, E.** (1962) M
8-03351
Sci. et Nat., (52) : 3-7
 La transplantation des plies en Mer du Nord (The transplantation of plaice in the North Sea)

Popular article reviewing historically experiments on transplantation of *Pleuronectes platessa*.

AQUATIC STOCKS

- M
8-03352
- Springer, V. G. & A. J. McErlean** (1962)
Amer. Midl. Nat., 67 (2) : 386-97

A study of the behavior of some tagged South Florida coral reef fishes

Several of larger spp. found on unique patch reefs were trapped and tagged over one-year period. Many recaptured, some as many as 10 to 41 times, and almost invariably on their home reefs. Suspect trap conditioning. Transplants of small numbers of white grunts.

- M
8-03353
- Rass, T. S.** (d.u.)*
Fishes from the greatest depths

En 60-7221. Available from the Ichthyological Laboratory, USFWS, U.S. National Museum, Washington, D.C.

- M
8-03354
- Rass, T. S.** (d.u.)*
The deepwater fishes of the Kurile Kamchatka Trench

En 59-2894UL. Available from the Ichthyological Laboratory, USFWS, U.S. National Museum, Washington, D.C.

- M
8-03355
- Svetovidov, A. N.** (d.u.)*
A review of the European species of the genus *Trigla*. Pisces Triglidæ

En 1936 Svetovidov, A. N. Available from the Ichthyological Laboratory, USFWS, U.S. National Museum, Washington, D.C.

- M
8-03356
- U.K. MAFF & Department of Agriculture & Fisheries for Scotland** (1962)
Fish Stk Rec., 1961 : 57 p.

Summarizes size and age compositions of *Pleuronectes platessa*, *Solea vulgaris*, *Gadus callarias*, *G. aeglefinus*, *G. merlangus*, *G. virens*, *Clupea harengus* catches by English vessels in N. Atlantic and Arctic waters. Summarizes samples, catches per unit effort, conversion tables, and gives short account of condition of each stock sampled.

- M
8-03357
- Talbot, F. H. & M. J. Penrith** (1962)
Publ. Oceanogr. Dep. Univ. Cape Town, (4)
Thunnus obesus Lowe in South Africa

- M
8-03358
- Dawson, C. E.** (1962)
Copeia, (1) : 138-46

Notes on anomalous American Heterosomata with descriptions of five new records

Literature is reviewed. Specimens of *Paralichthys dentatus* (L.), *Trinectes maculatus* (Bloch & Schneider) and *Symphurus plagiusa* (L.) exhibiting abnormal coloration described and ill. Instance of reversed scalation in *T. maculatus* is described. Frequency of anomalous flatfishes in respect to type of anomaly, geography and phylogenetic group is discussed.

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M

Berry, F. H. & L. R. Rivas (1962)

8-03359

Copeia, (1) : 152-60

Data on six species of needlefishes (Belonidae) from the western Atlantic

Belone argala Le Sueur, *Strongylura notata* (Poey), *S. timucu* (Walbaum), *Tylosurus acus* (Lacépède), *T. raphidoma* (Ranzani), and *Ablennes hians* (Valenciennes). Data are given on variations in numerable characters and ontogenetic changes in morphology and morphometry. Generic relationships, spp. differences, and ecological notes are discussed.

M

Squire, J. L., Jr. (1962)

8-03360

Copeia, (1) : 216-9

Marlin and swordfish in oceanic waters of the western North Atlantic

¹⁴ During period 1957 to 1960, the US Bureau of Commerical Fisheries, Gloucester, Massachusetts, conducted a program of explorations to investigate pelagic resources of oceanic northwestern Atlantic, by research vessel 'Delaware'. Reviews records of *Tetrapturus*, *Makaira* and *Xiphias* and oceanographic characteristic.

M

Morrow, J. E. (1962)

8-03361

Copeia, (1) : 220-1

Variation in the form of the pectoral girdle in the blue marlin

Ci 585020. Writer sought to show that form of pectoral girdle, particularly cleithrum, could be used to distinguish between the blue marlins, *Makaira nigricans* Lacépède, of the Atlantic and the Pacific Oceans. Observed differences between Atlantic and Pacific types might be related to the sex of the individuals, the females being the Pacific form, the males the Atlantic. Dr. C. R. Robins suggested that the size of the individual might also be involved.

M

Rosa, H., Jr. (Ed.) (1963)

8-03362

FAO Fish. Rep., (6), vol. 2 : 101-975

Proceedings of the world scientific meeting on the biology of tunas and related species, La Jolla, California, U.S.A., 2-14 July 1962

Pr 61-228me. Co 62-05722. Species synopsis. Contains 8-03363 to 8-03396.

M

Calkins, T. P. & W. L. Klawe (1963)

8-03363

FAO Fish. Rep., (6), vol. 2 : 130-46

Synopsis of biological data on black skipjack *Euthynnus lineatus* Kishinouye 1920

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

AQUATIC STOCKS

- Demir, M.** (1963) M
8-03364
FAO Fish. Rep., (6), vol. 2 : 101-29
 Synopsis of biological data on bonito *Sarda sarda* (Bloch) 1793

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Uchida, R. N.** (1963) M
8-03365
FAO Fish. Rep., (6), vol. 2 : 241-73
 Synopsis of biological data on frigate mackerel *Auxis thazard* (Lacépède) 1802 (Pacific Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Yoshida, H. O. & T. Otsu** (1963) M
8-03366
FAO Fish. Rep., (6), vol. 2 : 274-318
 Synopsis of biological data on albacore *Thunnus germon* (Lacépède) 1800 (Pacific and Indian Oceans)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Williams, F.** (1963) M
8-03367
FAO Fish. Rep., (6), vol. 2 : 157-66
 Synopsis of biological data on frigate mackerel *Auxis thazard* (Lacépède) 1802 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Williams, F.** (1963) M
8-03368
FAO Fish. Rep., (6), vol. 2 : 167-79
 Synopsis of biological data on little tuna *Euthynnus affinis* (Cantor) 1850 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Bell, R. R.** (1963) M
8-03369
FAO Fish. Rep., (6), vol. 2 : 380-421
 Synopsis of biological data on California bluefin tuna *Thunnus saliens* Jordan and Evermann 1926

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

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- Tiews, K.** (1963) M
8-03370
FAO Fish. Rep., (6), vol. 2 : 422-81
 Synopsis of biological data on bluefin tuna *Thunnus thynnus* (Linnaeus) 1758 (Atlantic and Mediterranean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Alverson, F. G. & C. L. Peterson** (1963) M
8-03371
FAO Fish. Rep., (6), vol. 2 : 482-514
 Synopsis of biological data on bigeye tuna *Parathunnus sibi* (Temminck and Schlegel) 1844

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Kikawa, S. et al.** (1963) M
8-03372
FAO Fish. Rep., (6), vol. 2 : 147-56
 Synopsis of biological data on bonito *Sarda orientalis* Temminck and Schlegel 1842

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Yamanaka, H. et al.** (1963) M
8-03373
FAO Fish. Rep., (6), vol. 2 : 180-217
 Synopsis of biological data on kuromaguro *Thunnus orientalis* (Temminck and Schlegel) 1842 (Pacific Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Kikawa, S. et al.** (1963) M
8-03374
FAO Fish. Rep., (6), vol. 2 : 218-40
 Synopsis on the biology of little tuna *Euthynnus yaito* Kishinouye 1923

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Mimura, K. et al.** (1963) M
8-03375
FAO Fish. Rep., (6), vol. 2 : 319-49
 Synopsis of biological data on yellowfin tuna *Neothunnus macropterus* Temminck and Schlegel 1842 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

AQUATIC STOCKS

- M
8-03376
- Mimura, K. et al.** (1963)
FAO Fish. Rep., (6), vol. 2 : 350-79
 Synopsis on the biology of bigeye tuna *Parathunnus mebachi* Kishinouye 1923 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03377
- Schaefer, M. B., G. C. Broadhead & C. J. Orange** (1963)
FAO Fish. Rep., (6), vol. 2 : 538-61
 Synopsis on the biology of yellowfin tuna *Thunnus (Neothunnus) albacares* (Bonnaterre) 1788 (Pacific Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03378
- Robins, J. P.** (1963)
FAO Fish. Rep., (6), vol. 2 : 562-87
 Synopsis of biological data on bluefin tuna *Thunnus thynnus maccoyii* (Castelnaue) 1872

Compiles information on identity, distribution, bionomics and life history, population, exploitation, protection and management of the sp.

- M
8-03379
- de Jaeger, B.** (1963)
FAO Fish. Rep., (6), vol. 2 : 588-607
 Synopsis of biological data on bluefin tuna *Thunnus thynnus orientalis* (Temminck and Schlegel) 1842, longfin tuna *Thunnus alalunga* (Bonnaterre) 1788, yellowfin tuna *Thunnus albacares* (Bonnaterre) 1788 and bigeye tuna *Thunnus obesus* (Lowe) 1839 (South Africa)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03380
- Talbot, F. H. & M. J. Penrith** (1963)
FAO Fish. Rep., (6), vol. 2 : 608-46
 Synopsis of biological data on species of the genus *Thunnus (sensu lato)* (South Africa)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03381
- Jones, S. & E. G. Silas** (1963)
FAO Fish. Rep., (6), vol. 2 : 663-94
 Synopsis of biological data on skipjack *Katsuwonus pelamis* (Linnaeus) 1758 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

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8-03382
- Waldron, K. D.** (1963)
FAO Fish. Rep., (6), vol. 2 : 695-748
 Synopsis of biological data on skipjack *Katsuwonus pelamis* (Linnaeus) 1758 (Pacific Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03383
- Idyll, C. P. & D. de Sylva** (1963)
FAO Fish. Rep., (6), vol. 2 : 749-54
 Synopsis of biological data on albacore *Thunnus alalunga* (Gmelin) 1788 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03384
- Idyll, C. P. & D. de Sylva** (1963)
FAO Fish. Rep., (6), vol. 2 : 755-60
 Synopsis of biological data on bonito *Sarda sarda* (Bloch) 1793 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03385
- Idyll, C. P. & D. de Sylva** (1963)
FAO Fish. Rep., (6), vol. 2 : 761-70
 Synopsis of biological data on the blackfin tuna *Thunnus atlanticus* (Lesson) 1830 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03386
- Idyll, C. P. & D. de Sylva** (1963)
FAO Fish. Rep., (6), vol. 2 : 771-7
 Synopsis of biological data on yellowfin tuna *Thunnus albacares* (Bonnaterre) 1788 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03387
- Idyll, C. P. & D. de Sylva** (1963)
FAO Fish. Rep., (6), vol. 2 : 778-81
 Synopsis of biological data on the frigate mackerel *Auxis thazard* (Lacépède) 1802 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

AQUATIC STOCKS

- M
8-03388
- Jones, S.** (1963)
FAO Fish. Rep., (6), vol. 2 : 782-810
 Synopsis of biological data on the long corseletted frigate mackerel *Auxis thynnoides* Bleeker 1855

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03389
- Silas, E. G.** (1963)
FAO Fish. Rep., (6), vol. 2 : 811-33
 Synopsis of biological data on double-lined mackerel *Grammatorcynus bicarinatus* (Quoy and Gaimard) (Indo-Pacific)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03390
- Silas, E. G.** (1963)
FAO Fish. Rep., (6), vol. 2 : 834-61
 Synopsis of biological data on oriental bonito *Sarda orientalis* (Temminck and Schlegel) 1842 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03391
- Jones, S.** (1963)
FAO Fish. Rep., (6), vol. 2 : 862-76
 Synopsis of biological data on the northern bluefin tuna *Kishinoella tonggol* (Bleeker) 1851 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03392
- Silas, E. G.** (1963)
FAO Fish. Rep., (6), vol. 2 : 877-99
 Synopsis of biological data on dogtooth tuna *Gymnosarda unicolor* (Rüppell) 1838 (Indo-Pacific)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M
8-03393
- Postel, E.** (1963)
FAO Fish. Rep., (6), vol. 2 : 515-37
 Exposé synoptique des données biologiques sur la bonite à ventre rayé *Katsuwonus pelamis* (Linné) 1758 (Synopsis of biological data on skipjack *Katsuwonus pelamis* (Linné) 1758)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

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Marchal, E. (1963)

8-03394

FAO Fish. Rep., (6), vol. 2 : 647-62

Exposé synoptique des données biologiques sur la thonine *Euthynnus alletteratus* (Rafinesque) 1810 (ouest Atlantique et Méditerranée) (Synopsis of biological data on little tuna *Euthynnus alletteratus* (Rafinesque) 1810 (west Atlantic and Mediterranean))

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

M

Vilela, H. & F. Frade (1963)

8-03395

FAO Fish. Rep., (6), vol. 2 : 900-30

Exposé synoptique sur la biologie du thon à nageoires jaunes *Neothunnus albacora* (Lowe) 1839 (Atlantique orientale) (Synopsis of biological data on yellowfin tuna *Neothunnus albacora* (Lowe) 1839 (eastern Atlantic))

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

M

Postel, E. (1963)

8-03396

FAO Fish. Rep., (6), vol. 2 : 931-75

Exposé synoptique sur la biologie du germon *Germo alalunga* (Cetti) 1777 (Atlantique orientale) (Synopsis of biological data on albacore *Germo alalunga* (Cetti) 1777 (eastern Atlantic))

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

M

Templeman, W. & A. M. Fleming (1962)

8-03397

J. Fish. Res. Bd Can., 19 (3) : 445-87

Cod tagging in the Newfoundland area during 1947 and 1948

4200 cod tagged in Newfoundland and Labrador inshore areas and on the Grand Bank and St. Pierre Bank. Migrations of cod from tagging in the inshore fishing areas off Nutak and Domino in Labrador, off Englee, St. John's Burin and Corbin, and Lark Harbour in Newfoundland and on the Grand Bank and St. Pierre Bank. Cod caught inshore by commercial fishermen and offshore by research otter trawler were tagged, some with an external, combination cellulose nitrate and aluminium disc bachelor-button tag inserted through the opercular bone, some with a 2-inch flat cellulose nitrate tag inserted in the body cavity through a posterior slit in the body wall. Internal tags gave fewer returns than external tags in tagging year, but opposite was true for years following. In years after tagging year percentage recaptures of smaller cod were in excess of those of larger cod. Although cod were recaptured almost immediately after being tagged from traps, those tagged from handlines and linetrawls were not caught by baited hooks for 7-10 days afterwards. Inverse relationship exists between length of otter-trawl drag from which fish were tagged and percentage recaptures.

- Liberman, E. A., L. M. Tsofina & I. M. Glagoleva** (1962) MG
8-03398
Dokl. Akad. Nauk SSSR, 145 (4) : 945-8

Generatsiia potentsialov deistviia myshechnymi voloknami rakoobraznykh v rastvorakh, sodershashchikh smesi $BaCl_2$ i $SrCl_2$ (Generation of action potentials by muscular fibres of Crustacea in solutions containing mixtures of $BaCl_2$ and $SrCl_2$)

- Seppovaara, O.** (1962) MF
8-03399
Ann. zool. Soc. Vanamo, 24 (1) : 86 p.

Zur Systematik und Ökologie des Lachses und der Forellen in den Binnengewässern Finnlands (On the systematics and ecology of salmon and trout in Finnish inland waters). Su

- Rosenstiel, E.** (1962) MF
8-03400
New Scient., 15 (304) : 578
Built-in obsolescence and living organisms

Le 8-02433.

- Behnke, R. J., T. P. Koh & P. R. Needham** (1962) MF
8-03401
Copeia, (2) : 400-7

Status of the landlocked salmonid fishes of Formosa with a review of *Oncorhynchus masou* (Brevoort)

5 salmonid specimens collected from mountain stream in 1960 suggest close affinity to *Oncorhynchus masou* and are considered to represent a sub-sp. In 1919, Jordan & Oshima described *Salmo formosanus* from Formosa. Specimen at Stanford Univ., listed as paratype of *S. formosanus*, has character found in no spp. of *Oncorhynchus*. May actually represent sp. of *Salmo*. Type specimen of *S. formosanus* cannot be located. List of taxonomic characters is given for *O. masou*.

- Hellier, T. R., Jr. & H. D. Hoese** (1962) MF
8-03402
Copeia, (2) : 453-4

Note on the schooling behavior of the striped mullet, *Mugil cephalus*, in Texas

Ci 61-06464. Unusually large, dense school observed in Mesquite Bay, a small—13.5 square miles—shallow marine lagoon near Rockport, during early 1958. Hydrography and ecology of area recently described. Effort made to estimate size of school by mark-and-recovery method.

- Strahan, R.** (1962) MF
8-03403
Copeia, (2) : 471-3

Survival of the hag, *Paramyxine atami* Dean, in diluted sea water

Ci 583669, 582943 and 61-04314. Specimens selected from larger commercial catch taken in 50 m off Izumozaki on 14-15 Jun. 1961.

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Gosline, W. A. (1962) MF
8-03404
Copeia, (2) : 473-5
Reviews and comments—Some recent Japanese ichthyological works

Brett, J. R. (1962) MF
8-03405
Copeia, (2) : 475-6
Reviews and comments—Rate of metabolism and food requirements of fishes

Re 61-06950.

Manter, H. W. (1962) MF
8-03406
Copeia, (2) : 476-7
Reviews and comments—Monogenetic trematodes, their systematics and phylogeny

Re 62-04446.

Cooper, E. L. (1962) MF
8-03407
Copeia, (2) : 477-8
Reviews and comments—The salmon

Re 59-4991.

Marshall, A. J. (Ed.) (1962) MF
8-03408
London, Macmillan
Parker and Haswell's textbook of zoology (7th edn.)

Volume 2—Chordates—, almost completely revised.

Piggins, D. J. (1962) MF
8-03409
Nature, Lond., 195 (4845) : 1017-8
Thyroid feeding of salmon parr

Ci 61-11606. Report on experiments with fresh thyroid feeding to *Salmo salar* in 1961 by Salmon Research Trust of Ireland, at Newport, Co. Mayo. Effect on maturation and survival.

Ishibashi, T. (1962) MF
8-03410
Gen. comp. Endocr., 2 : 415-24
Electrical activity of the caudal neurosecretory cells in the eel *Anguilla japonica* with special reference to synaptic transmission

Account of study designed to investigate both the morphological and electrophysiological evidence for the presence of synapses between neurosecretory cells and other nerve cells, and for the conduction of action potentials in the neurosecretory neuron.

AQUATIC STOCKS

Robertson, O. H. & B. C. Wexler (1962) MF
8-03411
Gen. comp. Endocr., 2 : 458-72

Histological changes in the organs and tissues of senile castrated kokanee salmon (*Oncorhynchus nerka kennerlyi*)

Finds degenerative changes in the pituitary, stomach and intestine, liver, kidney, spleen, thymus, thyroid, cardiovascular system and muscle, while the adrenocortical tissue and pancreas showed hyperplasia and hypertrophy. Changes resemble alterations occurring in spawning salmon, which suggests the possibility that the degenerative changes accompanying sexual maturation and spawning represent an acceleration of the aging process. Discusses relationship of adrenocortical cell hyperplasia to this process.

Cahn, P. H. & E. Shaw (1962) MF
8-03412
Copeia, (1) : 109-14

The first demonstration of lateral line cupulae in the Mugiliformes

Cupulae in larval *Menidia* are described. Table of presence of cupulae in other teleosts is incl.

Warner, K. (1962) MF
8-03413
Copeia, (1) : 131-8

The landlocked salmon spawning run at Cross Lake Thoroughfare, Maine

Spawning run of *Salmo salar* from 1953 to 1958. Sex ratio of spawners; tag return data indicated that some salmon spawn in consecutive years, but the majority spawn in alternate years.

Whitley, E. C. (1962) MF
8-03414
Copeia, (1) : 220

Occurrence of breeding gulf pipefish, *Syngnathus scovelli*, in the inland fresh waters of Louisiana

Author collected *S. scovelli* from fresh water in Lake Saint John near Ferriday, Louisiana, 1960.

Legendre, V. (1962) MF
8-03415
Copeia, (1) : 221-2

Author and type of *Lampetra*

Bardach, J. E. (1962) MF
8-03416
Copeia, (1) : 234-6

Reviews and comments—Experimental ecology of the feeding of fishes

Re 61-10823.

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Farris, D. A. (1962)

MF
8-03417

Copeia, (1) : 236-7

Reviews and comments—Experimental ecology of the feeding of fishes

Re 61-10823.

de Sylva, D. P. (1962)

MF
8-03418

Copeia, (1) : 241-2

Reviews and comments—Living fishes of the world

Re 8-02415.

Gunter, G. (1962)

MF
8-03419

Copeia, (1) : 243

Reviews and comments—Ecology of inland waters and estuaries

Re 61-10581.

Pearcy, W. G. (1962)

MF
8-03420

Bull. Bingham oceanogr. Coll., 18 (1) : 1-15

Ecology of an estuarine population of winter flounder, *Pseudopleuronectes americanus* (Walbaum)—1. Hydrography of the Mystic River estuary. Ru

Issued also as: *Contr. Mar. Res. Lab. Univ. Conn.*, (16).

Pearcy, W. G. (1962)

MF
8-03421

Bull. Bingham oceanogr. Coll., 18 (1) : 16-38

Ecology of an estuarine population of winter flounder, *Pseudopleuronectes americanus* (Walbaum)—2. Distribution and dynamics of larvae. Ru

Co 8-03420. Issued also as: *Contr. Mar. Res. Lab. Univ. Conn.*, (17).

Pearcy, W. G. (1962)

MF
8-03422

Bull. Bingham oceanogr. Coll., 18 (1) : 39-64

Ecology of an estuarine population of winter flounder, *Pseudopleuronectes americanus* (Walbaum)—3. Distribution, abundance, growth and production of juveniles; survival of larvae and juveniles. Ru

Co 8-03421. Issued also as: *Contr. Mar. Res. Lab. Univ. Conn.*, (18).

Pearcy, W. G. (1962)

MF
8-03423

Bull. Bingham oceanogr. Coll., 18 (1) : 65-78

Ecology of an estuarine population of winter flounder, *Pseudopleuronectes americanus* (Walbaum)—4. Food habits of larvae and juveniles. Ru

Co 8-03422. Issued also as: *Contr. Mar. Res. Lab. Univ. Conn.*, (19).

AQUATIC STOCKS

- Cold Spring Harbor, N.Y. Biological Laboratory (1961)*** MF
Cold Spr. Harb. Symp. quant. Biol., 25 : 530 8-03424
 Biological clocks
 Contains 61-12706 and 61-12707.
- Spanner, D. C. (1961)** MF
New Phytol., 60 (3) : 403-4 8-03425
 [Review]
 Re 8-03424.
- Zotin, A. I. & B. F. Poglazov (1962)** MF
Dokl. Akad. Nauk SSSR, 143 (5) : 1233-6 8-03426
 Vozbudimost' poverkhnostnogo sloia tsitoplazmy i drobienie iaits ryb i amfibii (Excitability of the superficial protoplasm layer and egg segmentation in fish and amphibians)
- Polikarnov, G. G. & V. N. Ivanov (1962)** MF
Dokl. Akad. Nauk SSSR, 144 (1) : 219-22 8-03427
 Povrezhdaiushchee deistvie strontsiia-90-ittriiia-90 na rannii period razvitiia barabuli zelenushki, stavridy i khamsy (The injurious effect of Sr^{90} - Y^{90} on the early development period in *Mullus barbatus ponticus*, *Crenilabrus tinca* \times *C. quinquemaculatus*, *Trachurus trachurus* and *Engraulis encrasicolus*)
- Chulitskaia, E. V. (1962)** MF
Dokl. Akad. Nauk SSSR, 144 (1) : 245-7 8-03428
 Izuchenie indutsiruiushchego deistviia mezodermy na material slukhovogo puzyr'ka u osetrovnykh ryb i amfibii (A study of the inductive effect of the mesoderm on the material of the auditory vesicle in Acipenseridae fishes and amphibians)
- Zubova, S. E. (1962)** MF
Dokl. Akad. Nauk SSSR, 145 (3) : 694-7 8-03429
 Kharakteristika variabil'nosti skorosti razvitiia zarodyshei osetrovnykh ryb (Type of variation of development rate in Acipenseridae embryos)
- Detlaf, T. A. & S. E. Zubova (1962)** MF
Dokl. Akad. Nauk SSSR, 143 (3) : 746-8 8-03430
 Sootnoshenie prodolzhitel'nosti peridov sozrevaniia i zarodyshevogo razvitiia u osetra i sevriugi (A correlation between the periods of maturation and embryonic development in *Acipenser guldenstaedtii* and *A. stellatus*)
- Vatova, A. (1962)** MF
J. Cons., 27 : 109-15 8-03431
 The salt-water fish farms of the north Adriatic and their fauna
 WFA 13 (4) : 3. Fish culture—brackish water.

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Mohr, H. (1960)

MF
8-03432

Prot. FischTech., 31 (7) : 121-9

Aquarienversuche über die Scheuchwirkung eines Vorhangs aus Luftblasen bei einigen Süßwasserfischen, besonders bei Aalen (Aquarium experiments on the frightening effect of an air-bubble curtain on some species of fresh water fish, especially eel)

WFA 13 (4) : 17. Experiments carried out with *Salmo gairdneri*, *Abramis brama*, *Leuciscus rutilus*, *L. idus*, *Carassius vulgaris*, *Acerina cernua*, *Anguilla vulgaris*.

de Wit, J. J. D. (1962)

F
8-03433

Canad. J. Zool., 40 (3) : 421-4

Hybridization experiments in acheilognathine fishes (Cyprinidae, Teleostei) —The interspecific hybrids between *Acheilognathus lanceolatus* and *Acheilognathus tabira*

In order to establish the presence of gametic compatibility and the degree of genomic compatibility, both spp. were artificially crossed.

de Wit, J. J. D. (1962)

F
8-03434

Canad. J. Zool., 40 (3) : 425-30

Hybridization experiments in acheilognathine fishes (Cyprinidae, Teleostei) —Fertile intrageneric hybrids between female *Acheilognathus lanceolatus* and male *Acheilognathus limbatus* from Japan

Co 8-03433. Reports upon the F_1 hybrid between the 2 spp. and the F_2 progenies which were obtained by crossing male and female F_1 hybrids back to female and male *A. lanceolatus* respectively.

Mahon, E. F., W. S. Hoar & S. Tabata (1962)

F
8-03435

Canad. J. Zool., 40 (3) : 449-64

Histophysiological studies of the adrenal tissues of the goldfish

Evaluation of the effects of sudden temperature changes on the histology of the adrenal.

Delco, E. A., Jr. (1962)

F
8-03436

Thesis, Univ. of Texas, 226 p.

Reproductive behavior and sexual isolating mechanisms between two sympatric cyprinid fishes

DA 23 (1) : 360. 2 spp. studied were *Notropis lutrensis* and *N. venustus*. Both produced similar results in electrophoretic patterns, chromosome number, ecological requirements, color preference, incubation time, movement, and substrate preference. Food habits were similar. Courtship acts similar; however, frequency of each activity differs.

F

Francois, D. D. (1962)

8-03437

Thesis, Cornell Univ., USA, 154 p.

A revision of the Australian cray-fish genus *Euastacus* (Decapoda, Parastacidae)

DA 23 (1) : 362. Revision incl. 23 spp., 5 of which are described as new. Other new spp. indicated but not described because of inadequate material.

F

Legault, R. O. (1962)

8-03438

Thesis, Univ. of Michigan, 116 p.

The early embryology of teleosts with special reference to *Percina caprodes*, *Brachydanio rerio* and *Osmerus mordax*DA 23 (1) : 365. Basic features in early embryology were identified in study of their development, and correlated with the facts reported in the literature on them and other teleosts and the holostean, *Amia calva*.

F

Miller, H. C. (1962)

8-03439

Thesis, Cornell Univ., USA, 134 p.

The behavior of *Lepomis gibbosus* (Linnaeus) with notes on the behavior of other species of *Lepomis*, *Elassoma evergladei*, and *Enneacanthus gloriosus*

DA 23 (1) : 365. Maintenance behavior, agonistic behavior; social groups and reproductive behavior are described.

F

Schneider, H. (1962)

8-03440

Copeia, (2) : 336-8

The labyrinth of two species of drumfish (Sciaenidae)

Anatomical study of labyrinth of *Aplodinotus grunniens* and *Micropogon furnieri*. Since sound production is common in both spp., development of hearing part of labyrinth leads to conclusion that they may well be able to utilize their acoustic signals.

F

Barlow, G. W. (1962)

8-03441

Copeia, (2) : 346-60Ethology of the Asian teleost, *Badis badis*—4. Sexual behavior

Judging from elaborate spawning behavior, its general habits and its appearance, as well as its distribution, it is most likely related to anabantoid fishes.

F

Gordon, M. S. & D. E. Rosen (1962)

8-03442

Copeia, (2) : 360-8A cavernicolous form of the poeciliid fish *Poecilia spheonops* from Tabasco, Mexico

First known cavernicolous population described from a calcium sulfate saturated cave stream in Tabasco, Mexico. Detailed physical description of cave is presented, also list of other organisms so far found within the cave and its stream.

Minckley, W. L. & J. E. Craddock (1962)

F

8-03443

Copeia, (2) : 369-77

A new species of *Phenacobius* (Cyprinidae) from the upper Tennessee River system

New sp. of fine-scaled minnow previously identified with *P. catastomus* Jordan, is described and compared with other southeastern representatives of the genus—*P. uranops* Cope, *P. teratulus* Cope, and *P. catastomus*. Possible origins and relationships of *P. crassilabrum*, and of genus *Phenacobius*, are discussed.

Holčik, J. & J. J. Duyvené de Wit (1962)

F

8-03444

Copeia, (2) : 377-90

Characteristics of *Rhodeus ocellatus* and *Acheilognathus lanceolatus* hybrids

Taxonomic characteristics of both reciprocals of artificially produced hybrids are described. Both kinds of intergeneric hybrids were raised to adult stage. All showed a male phenotype, except for some neuters.

Minckley, W. L. (1962)

F

8-03445

Copeia, (2) : 391-6

Two new species of fishes of the genus *Gambusia* (Poeciliidae) from north-eastern Mexico

G. longispinis, restricted to semi-isolated intermontane basin surrounding Cuatro Ciénegas, Coahuila, Mexico, and *G. marshi* found throughout Rio Salado basin of northern Mexico, are described. Former is member of *G. nobilis* sp. group of Texas and northern Mexico, whereas the latter belong to subgenus *Heterophallina*.

Hubbs, C. & E. A. Delco, Jr. (1962)

F

8-03446

Copeia, (2) : 396-400

Courtship preferences of *Gambusia affinis* associated with the sympatry of the parental populations

Males isolated in observational tanks. Two females were introduced into tank simultaneously. Males' courtship activities were recorded. Those reared in isolated cultures preferred females of their own sp. Males reared in mixed cultures are less discriminating than those reared in isolation, but no interspecific copulations were observed in sympatric stocks reared in mixed cultures.

Miller, R. J. (1962)

F

8-03447

Copeia, (2) : 407-17

Reproductive behavior of the stoneroller minnow, *Camptostoma anomalum pullum*

Nest-building, territory defense, and spawning.

- Bartholomew, M. A., J. DiVall & J. E. Morrow** (1962) F
8-03448
Copeia, (2) : 449-50
 Silver pike, an atypical *Esox lucius*, in Alaska, a first record

Ci 61-07183. During ecological survey of fishes of the upper Tanana and Yukon River basins in Alaska, three unusually pigmented pike were taken at mouth of the Kandik River, on the Yukon, in Aug. 1961. Present specimens appear to represent first record of this mutant from west of Rocky Mountains.

- Miller, R. J.** (1962) F
8-03449
Copeia, (2) : 450-2
 Sexual development and hermaphroditism in the hybrid cyprinid, *Notropis cornutus* × *N. rubellus*

Raney (1940) reported hybrids of both sexes spawning with opposite sexes of *N. cornutus* in the typical *N. cornutus* manner, and presented data on the sex ratio and gonad conditions. Author investigated reproductive behavior and ecology of 3 forms in the same population at Catatonk Creek at Candor, New York, during 1959, 1960 and 1961, and examined the gonads of specimens collected during May and June, when they were still in breeding condition, and during May and June from 1939 to 1949.

- Qayyum, A. & S. Z. Qasim** (1962) F
8-03450
Copeia, (2) : 465-7
 Behavior of the Indian murrelet, *Ophicephalus punctatus*, during brood care

Ci 61-07919. Observations in N. India on families collected from ponds, concluded both sexes take part in caring for young. Studies on behavior of parents made by keeping families under observation for several days.

- Brown, B. E.** (1962) F
8-03451
Copeia, (2) : 469-71
 Occurrence of the walleye, *Stizostedion vitreum*, in Alabama south of the Tennessee Valley

Rotenone population studies since 1949 by Auburn University Agricultural Experiment Station and Alabama Department of Conservation have shown walleye to be present throughout central and southern Alabama. Surveys recorded in annual reports of the Alabama Department of Conservation from 1949 to 1959.

- Betz, T. W.** (1962) FG
8-03452
Copeia, (2) : 284-7
 Surgical anesthesia in reptiles, with special reference to the water snake, *Natrix rhombifera*

Eighteen *Natrix* from wildlife reserve in S.E. Missouri injected with nembutal or surital. Literature reports of use of ether, chloroform, nembutal, surital, pentothal, MS-222, urethane, decamethonium iodide, and tubocurarine chloride as anesthetics in reptiles are compared.

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Needham, P. R. (1962)

F
8-03453

S. Francisco, Holden-Day Inc., 120 p.

A guide to the study of fresh-water biology

Facilitates recognition of fresh-water organisms in field and laboratory. Completely revised, plates, glossary of terms, and material on laboratory procedures, sampling methods and equipment.

Hickling, C. F. (1962)*

F
8-03454

London, Faber & Faber, 295 p.

Fish culture

McConnell, R. (1962)

F
8-03455

New Scient., 15 (305) : 638-9

Fish culture: its history and techniques

Re 8-03454.

Zandee, D. I. (1962)

F
8-03456

Nature, Lond., 195 (4843) : 814-5

Lipid metabolism in *Astacus astacus* (L.)

Work concerned with possible biosynthesis of cholesterol.

Erasmus, D. A. (1962)

F
8-03457

Nature, Lond., 195 (4843): 828-9

Distribution of certain strigeid trematodes in Great Britain

Over past eight years, parasitological studies on invertebrate fauna of freshwaters in Glamorgan, South Wales, have shown larval stage of genus *Apatemon* to be quite widely distributed in leeches—particularly *Erpobdella*—and in snails, especially *Lymnaea pereger*.

Branson, B. A. & G. A. Moore (1962)

F
8-03458

Copeia, (1) : 1-108

The lateralis components of the acoustico-lateralis system in the sunfish family Centrarchidae

Materials and methods ; distribution of external neuromasts ; comparison with other taxa ; osteological components of the lateral-line system ; comparison of *Ambloplites* with other Centrarchidae ; comparison of centrarchid osteological components with those of other taxa ; histological observations ; histology of canals and canal neuromasts ; innervation of neuromasts ; phylogeny of the Centrarchidae ; taxonomic implications ; suggestions for further study.

- F
8-03459
- Crossman, E. J.** (1962)
Copeia, (1) : 114-23
 The redbfin pickerel, *Esox a. americanus* in North Carolina

Data on sex ratio, sex differentiation, spawning and egg production, food, growth and parasites based on 237 specimens are presented. Distribution in N. Carolina is summarized using museum collections and literature. Color and meristic descriptions are given as are other characteristics useful in distinguishing this sp. from the sympatric *Esox niger* at various sizes.

- F
8-03460
- Blackett, R. F.** (1962)
Copeia, (1) : 124-30
 Some phases in the life history of the Alaskan blackfish, *Dallia pectoralis*

New inland record for distribution established in Big Eldorado Creek in Tanana River drainage of central interior Alaska. Fish were examined to gain knowledge of movements, age and growth, and reproductive behavior.

- F
8-03461
- New, J. G.** (1962)
Copeia, (1) : 147-52
 Hybridization between two cyprinids, *Chrosomus eos* and *Chrosomus neogaeus*

Morphometric study of 12 characteristics of *C. eos*, *C. eos* × *C. neogaeus*, and *C. neogaeus*. Conclusion is that introgression is occurring.

- F
8-03462
- Packer, W. C.** (1962)
Copeia, (1) : 207-8
 Aquatic homing behavior in *Taricha rivularis*

Newt able to orient directly to its home area following translocation.

- F
8-03463
- Hubbs, C. L.** (1962)
Copeia, (1) : 237-8
 Reviews and comments—Studies on the freshwater fishes of Japan

Re 61-10139 and 61-10140.

- F
8-03464
- Lillelund, K.** (1961)
Arch. FischWiss., 12 (1) : 1-128

Untersuchungen über die Biologie und Populationsdynamik des Stintes *Osmerus eperlanus eperlanus* (Linnaeus 1758), der Elbe (Investigations on biology and population dynamics on the smelt, *Osmerus eperlanus eperlanus* (Linnaeus 1758) of the river Elbe) En

Fishing season, by catches, catch per unit effort; spawning season and area, maturity, fecundity, survival, temperature and salinity tolerances, recruitment, age-determination and growth, sex differences, fresh water and marine, yield predictions, predicted effect of dam at Geesthacht.

Anon. (1962)

F

New Scient., 15 (306) : 662

8-03465

Notes and comments—Trout show susceptibility to cancer-producing agents

Possible use of rainbow trout for screening of carcinogens, particularly in food, is forecast by the US Bureau of Sport Fisheries and Wildlife.

Gery, J. (1961)

F

Bonn. zool. Beitr., 12 (3-4) : 332-42

8-03466

Pterohemiodus luelingi sp. nov., un curieux poisson characoïde à nageoire dorsale filamenteuse, avec une clé des genres d'Hemiodontinae (Ostariophysi-Erythrinidae) (*Pterohemiodus luelingi* sp. nov., a curious characoid fish with filamentous dorsal fin, with a key to the genera of Hemiodontinae (Ostariophysi-Erythrinidae))

Ill. description of specimen from Peruvian Amazon collection of K. H. Lüling.

Uspenskaia, A. V. (1962)

F

Dokl. Akad. Nauk SSSR, 142 (5) : 1212-5

8-03467

O pitanii monogeneticheskikh sosal'shchikov (On the nutrition of monogenetic trematodes)

Yu, W. & L. Chun (1962)

F

China Reconstructs, 11 (7) : 28-9

8-03468

Experiments in fish breeding

TA 17 (10) j2650. Brief discussion of experiments at Kwantung Research Institute of Aquatic Products in Canton, China. *Penaeus monodon*, could be made to live in fresh water by gradually decreasing the salinity of sea water during 20 days. Crosses between *Tilapia mossambica* and the carp, silver carp and bighead resulted in a F_1 with the properties of both the male—large size and resistance to cold—and the female parent. Experiments in crossing bighead with silver carp have produced a new variety which grows much more rapidly and spawns more eggs.

Malacca. Tropical Fish Culture Research Institute (1961?)

F

Rep. trop. Fish. Cult. Res. Inst. Malacca, 1960-61 : 31 p.

8-03469

TA 17 (10) : 2649. Contains information on institute's research programme, incl. i.a., 1. *Tilapia mossambica* hybrid production, 2. the spawning of grass carp, 3. fertilizer trials, 4. selection pressure, 5. botanical studies of phytoplankton and macrophytic vegetation, and 6. comparative studies on the ability of different algal spp. to be digested by *Tilapia mossambica*. Brief discussion on economics of fish culture stresses importance of fertilizing fish ponds with phosphate.

MISCELLANEOUS AND AUXILIARIES

Kusakina, A. A. (1962)

F
8-03470

Dokl. Akad. Nauk SSSR, 144 (5) : 1160-2

Teploustoichnost' myshts kolinesterazy myshechnykh gomogenatov u karasei iz goriachego istochnika i obychnykh rodoemov (Thermostability of muscles and of cholinesterase of muscular homogenates in *Carassius* fishes from thermal springs or common water basins)

Kulakovskaya, O. P. (1962)

F
8-03471

Dokl. Akad. Nauk SSSR, 143 (4) : 1001-4

Novyi rod i vid gvozdnichnika *BREVISCOLEX orientalis* (Caryophyllaeidae, cestodes) iz ryb basseina Amura (A new genus and species of *BREVISCOLEX orientalis* from fishes of the Amur basin)

Black, E. C. et al. (1962)

F
8-03472

J. Fish. Res. Bd Can., 19 (3) : 409-36

Changes in glycogen, pyruvate and lactate in rainbow trout (*Salmo gairdneri*) during and following muscular activity

Experiments muscular fatigue in 1½-year-old trout carried out at hatchery at Summerland, British Columbia during the summers of 1958 and 1959. Observations made on hemoglobin, water content of muscle and whole blood, muscle and liver glycogen, and pyruvate and lactate in muscle, blood and liver.

Miller, R. B. & F. Miller (1962)

F
8-03473

J. Fish. Res. Bd Can., 19 (3) : 365-75

Diet, glycogen reserves and resistance to fatigue in hatchery rainbow trout. Part 2

Co 59-7514. Violent or prolonged exercise increased blood lactate content confirming earlier findings. In stream tests, two groups of hatchery-raised rainbow trout planted in mountain stream containing resident cutthroat trout. One group had been raised on fortified pelleted ration, other on standard raw liver diet. Adverse environmental conditions did not prolong acclimatization period for the pellet-fed trout, as shown by cessation of mortality at the end of that time. Liver-fed trout continued to die in appreciable numbers until three weeks had elapsed. Appendix table gives summary of Gorge Creek trout plantings in 1952-57.

MISCELLANEOUS AND AUXILIARIES

Hubbs, C. L. (1962)

M
8-03474

Copeia, (2) : 481-2

Editorial notes and news—Death notice

Obituary of Anton Frederik Bruun.

K

8 (3) : 257

- Swallow, J. C.** (1962) M
8-03475
Nature, Lond., 195 (4844) : 857
 News and views—Henry Bryant Bigelow
 Gold Medal for oceanography.
- Barnes, C. A. & F. A. Richards** (1962) M
8-03476
J. Mar. Res., 20 (1) : 1-2
 Thomas Gordon Thompson, 1888-1961
 Obituary of this oceanographer.
- Yarham, E. R.** (1961)* M
8-03477
Naut. Mag., August: 92-4
 Solving secrets of ocean depths
- Sager, G.** (1961)* M
8-03478
Geogr. Ber., 19 (2) : 77-84
 Vier Jahrzehnte Wirken im Dienste der Ozeanographie: Prof. H. U. Sverdrup, 15.11.1888-21.8.1957 (Forty years in the service of oceanography: Prof. H. U. Sverdrup, 15.11.1888-21.8.1957)
- Miles, S.** (1962) M
8-03479
New Scient., 15 (306) : 671-3
 Physiological problems of deep-sea diving
 Human tissues little affected by increasing pressure. But cavities which contain air or gas—the respiratory system, inner ear spaces, sinuses and digestive tract—are sensitive to pressure changes, and all present special problem for consideration when a deep dive is planned.
- Argentina. Laws, Statutes, etc.** (1962) M
8-03480
Bol. ofic. Argent., (19.728) : 1
 Decreto N° 36 relativo a la radicación o importación de buques de bandera extranjera clasificados como pesqueros de altura—3 de enero de 1962 (Decree No. 36 relative to the temporary or permanent import of vessels flying foreign flags and classified as high seas fishing vessels—3 January 1962)
 Allows import of such vessels free of customs dues provided they fulfil minimum technical standards. The purpose is to expand the national fishing fleet and so develop the national industry thereby stabilizing the sales prices of fish in the country.
- Australia. Commonwealth. Laws, Statutes, etc.** (1962) M
8-03481
Commonw. Aust. Gaz., (4) : 240-1
 Order revoking and replacing order dated 24 May 1939, under section 423 of the navigation act 1912-1961—12 January 1962
 Specifies provisions of the navigation act and of regulations made thereunder which shall not apply to fishing boats.

MISCELLANEOUS AND AUXILIARIES

New South Wales. Laws, Statutes, etc. (1960)

M
8-03482

Act (48) : 15 p.

Prevention of oil pollution of navigable waters act, 1960: An act relating to the prevention of the pollution of navigable waters by oil; to repeal the oil in navigable waters act, 1927; and for purposes connected therewith—17 November 1960

Detailed provisions respecting discharge of oil into waters, removal of oil pollution, equipment in ships to prevent oil pollution, records, reporting, investigation, etc.

New South Wales. Laws, Statutes, etc. (1962)

M
8-03483

Govt Gaz. N.S.W., (14) : 372

Amendment of regulations made under the fisheries and oyster farms act, 1935-1960.—9 February 1962

Inserts regulation No. 159 and amends schedule C of the said act, as amended by subsequent regulations by the substitution for "Sea mullet, including hard-gut and bully (*Mugil dobula*)—13" of "Sea mullet, including hard-gut and bully (*Mugil cephalus*)—12 1/2".

Australia. Northern Territory. Laws, Statutes, etc. (1961)

M
8-03484

Ordinance (25) : 2 p.

Pearling ordinance 1961: An ordinance to amend the pearling ordinance 1956-1958.—16 August 1961

Relates to conditions of employment of indentured labourers.

Tasmania. Laws, Statutes, etc. (1961)

M
8-03485

Act (15) : 10 p.

Oil pollution act 1961: An act to prevent the pollution of navigable water with oil.—7 September 1961

Extensive provisions respecting discharge of oil into waters, removal of oil pollution, equipment in ships to prevent pollution, facilities in harbours for disposal of oil, etc.

Canada. Laws, Statutes, etc. (1961)

M
8-03486

Can. Gaz. (II), (23) : 1790

SOR/61-530. Notice relating to the propagation of fish in Malpeque Bay, Prince Edward Island, made under the fisheries act—17 November 1961

Concerns Bideford River.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

M

Canada. Laws, Statutes, etc. (1961)

8-03487

Can. Gaz. (II), (23) : 1867

DORS/61-530. Avis concernant la propagation du poisson dans la baie Malpeque, Ile du Prince-Edouard, selon la loi sur les pêcheries—17 novembre 1961 (SOR/61-530. Notice relating to the propagation of fish in Malpeque Bay, Prince Edward Island, made under the fisheries act—17 November 1961)

Fr 8-03486.

M

Canada. Laws, Statutes, etc. (1961)

8-03488

Can. Gaz. (II), (23) : 1721

SOR/61-511. Order in council P.C. 1961-1676 amending the New Brunswick fishery regulations made under the fisheries act—23 November 1961

No person shall fish for, catch, kill or have in possession herring under 4 inches in length, except when they are mixed with herring of greater length and do not exceed twenty-five per cent by volume of the entire lot.

M

Canada. Laws, Statutes, etc. (1961)

8-03489

Can. Gaz. (II), (23) : 1797

DORS/61-511. Décret C.P. 1961-1676 modifiant le règlement de pêche du Nouveau-Brunswick, en vertu de la loi sur les pêcheries—23 novembre 1961 (SOR/61-511. Order in council P.C. 1961-1676 amending the New Brunswick fishery regulations made under the fisheries act—23 November 1961)

Fr 8-03488.

M

Canada. Laws, Statutes, etc. (1961)

8-03490

Can. Gaz. (II), (23) : 1736

SOR/61-514. Order in council P.C. 1961-1679 amending the whaling regulations made under the whaling convention act—23 November 1961

Concerns limit bag for humpback whales in Greenland waters, fishing for blue whales in the North Pacific area and use of helicopter or other aircraft as whale catcher.

M

Canada. Laws, Statutes, etc. (1961)

8-03491

Can. Gaz. (II), (23) : 1813

DORS/61-514. Décret C.P. 1961-1679 modifiant le règlement de chasse à la baleine en vertu de la loi sur la convention concernant la chasse à la baleine—23 novembre 1961 (SOR/61-514. Order in council P.C. 1961-1679 amending the whaling regulations made under the whaling convention act—23 November 1961)

Fr 8-03490.

MISCELLANEOUS AND AUXILIARIES

M
8-03492

Canada. Laws, Statutes, etc. (1961)
Can. Gaz. (II), (24) : 1827

SOR/61-542. Order in council P.C. 1961-1781, amending the British Columbia fishery regulations made under the fisheries act—14 December 1961

Concerns bag limit for herring in the Vancouver Island area and gill-net fishing for salmon in district No. 1.

M
8-03493

Canada. Laws, Statutes, etc. (1961)
Can. Gaz. (II), (24) : 1908-9

DORS/61-542. Décret C.P. 1961-1781, modifiant le règlement de pêche de la Colombie-Britannique, en vertu de la loi sur les pêcheries—14 décembre 1961 (SOR/61-542. Order in council P.C. 1961-1781, amending the British Columbia fishery regulations made under the fisheries act—14 December 1961)

Fr 8-03492.

M
8-03494

Chile. Laws, Statutes, etc. (1961)
Diario ofic., Santiago, (24,908) : 621-3

Decreto número 133 aprobando el reglamento del decreto con fuerza de ley N° 266 de 1960—9 febrero de 1961 (Decree No. 133 approving regulations under decree-law No. 266 of 1960—9 February 1961)

CR 60-9770. In respect of tax exemptions for persons engaged in the fishing industry, including construction or improvement of fishing craft: an encouragement measure.

M
8-03495

Chile. Laws, Statutes, etc. (1961)
Diario ofic., Santiago, (25,093) : 2085

Decreto número 1489 ampliando el contingente de exportación de algas rojas de la variedad "*Gelidium*"—19 de octubre de 1961 (Decree No. 1489 increasing the export quota of red algae of the *Gelidium* variety—19 October 1961)

M
8-03496

Chile. Laws, Statutes, etc. (1961)
Diario ofic., Santiago, (25,111) : 2229-30

Decreto número 605 fijando la tarifa que indica para las faenas de embarque de aceite de pescado por canerías particulares—3 de noviembre de 1961 (Decree No. 605 fixing the rate for the loading of fish oil on board ship from private pipe lines—3 November 1961)

M
8-03497

Chile. Laws, Statutes, etc. (1961)
Diario ofic., Santiago, (25,105) : 2186

Decreto número 1601. Amplía el contingente de exportación de algas marinas variedad "*Gelidium*"—9 de noviembre de 1961 (Decree No. 1601 increasing the export quota of seaweed of the *Gelidium* variety—9 November 1961)

Chile. Laws, Statutes, etc. (1961)

M

8-03498

Diario ofic., Santiago, (25,145) : 171

Decreto número 1078 aprobando el reglamento sobre concesión de permisos a barcos pesqueros de bandera extranjera que indica para pescar en aguas territoriales chilenas y derogando el decreto supremo No. 946, de 8 octubre de 1956—14 de diciembre de 1961 (Decree No. 1078 approving the regulations governing the grant of permits to fishing vessels flying foreign flags for the purpose of fishing in Chilean territorial waters and rescinding supreme decree No. 946 of 8 October 1958—14 December 1961)

The vessels concerned must be supplying the Chilean market.

Chile. Laws, Statutes, etc. (1961)

M

8-03499

Diario ofic., Santiago, (25,161) : 293

Decreto número 1101 estableciendo exigencia de guía de libre tránsito para el transporte de pescado extraído en el litoral de la provincia de Atacama—20 de diciembre de 1961 (Decree No. 1101 establishing a free transit permit requirement for the transport of fish caught off the coast of the Province of Atacama—20 December 1961)

To suppress the practice of catching fish by using dynamite.

Ecuador. Laws, Statutes, etc. (1960)

M

8-03500

Reg. ofic. Ecuador, (1091) : 327-9

Decreto No. 464-c autorizando a naves de bandera extranjera la pesca de explotación en aguas territoriales—4 de marzo de 1960 (Executive decree No. 464-c authorizing craft flying foreign flags to engage in commercial fishing in territorial waters—4 March 1960)

These provisions do not apply to the fishing of cod, shrimp, lobster or whales, all of which are forbidden.

Ecuador. Laws, Statutes, etc. (1961)

M

8-03501

Reg. ofic. Ecuador, (36) : 306

Resolución reformando el art. 58 de la ley de pesca y cacería marítima—8 de diciembre de 1961 (Resolution amending article 58 of the sea fishing and hunting act—8 December 1961)

Money collected as fisheries taxes or fines shall be spent in the proportion of 40 per cent by the national navy for the purchase of equipment for patrolling territorial waters and 60 per cent to be turned over to the ministry of development for investment in fisheries development.

France. Laws, Statutes, etc. (1961)

M

8-03502

J. off. Répub. franç., (282) : 11036

Arrêté relatif aux livraisons de sucre dénaturé pour l'alimentation animale—29 novembre 1961 (Order relating to deliveries of denatured sugar for animal feed—29 November 1961)

Prescribes products to be used in denaturing fish meal, starch, etc.

MISCELLANEOUS AND AUXILIARIES

M
8-03503

Greece. Laws, Statutes, etc. (1960)
Ephem. Kybern., I (179) : 1883

B. diatagma up'arith. 732 peri apagoreuseos alieias dià kyklikon diktyon (gri-gri) emtòs tou orμου Nauarinou (Royal decree No. 732, prohibiting night and day fishing in Navarino Bay with "gri-gri" nets—29 October 1960). *He*

M
8-03504

Greece. Laws, Statutes, etc. (1960)
Ephem. Kybern., I (179) : 1884-6

B. diatagma up'arith. 735 peri kanonismou tes alieias dià mechanotraton (Royal decree No. 735, regulating trawl fishing from craft—29 October 1960). *He*

M
8-03505

Greece. Laws, Statutes, etc. (1960)
Ephem. Kybern., I (191) : 1968

B. diatagma up'arith. 793 peri alieias dià volkon (Royal decree No. 793, concerning fishing with "volkos" nets—14 November 1960). *He*

M
8-03506

Greece. Laws, Statutes, etc. (1961)
Ephem. Kybern., I (112) : 1091

B. diatagma up'arith. 447 peri alieias di' upobruchiòn tuphekiou (Royal decree No. 447, concerning submarine fishing—25 June 1961). *He*

M
8-03507

Guatemala. Laws, Statutes, etc. (1961)
Guatemalteco, (44) : 433-4

Decreto número 1493 retificando la convención sobre plataforma continental —3 de noviembre de 1961 (Legislative decree No. 1493: Ratification of the convention on the continental shelf—3 November 1961)

Adopted at Geneva on 29 Apr. 1958.

M
8-03508

Kerala. Laws, Statutes, etc. (1961)
Kerala Gaz., (5) Pt. 1 : 247-8

Order G.O.MS. 1277/61/Agri: Rules for the subsidized supply of fishing boats, nets and other implements to fishermen co-operative societies/Fishermen who have either lost their fishing implements or those implements are completely damaged beyond any repairs while fishing in the sea due to stormy weather or due to other circumstances beyond their control—26 December 1961

The fishing implements include fishing canoes, dug-out or plank built, nets and accessories.

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Luxembourg. Laws, Statutes, etc. (1962) M
8-03509
Mém. Luxemb., (5) : 121-2

Règlement ministériel du 23 janvier 1962 déterminant le droit spécial à l'importation de certains produits agricoles et alimentaires (Ministerial regulation determining the special import duty on certain agricultural and food products—23 January 1962)

Includes fish meals and powders.

Madagascar. Laws, Statutes, etc. (1962) M
8-03510
J. off. Répub. malgache, (206) : 165

Additif No. 62-036 au décret No. 61-288 du 9 juin 1961 portant organisation du service de l'élevage, de la pêche maritime et des industries animales—17 janvier 1962 (Addendum No. 62-036 to decree No. 61-288 of 9 June 1961 relative to the organization of the stockbreeding, sea fisheries and animal industries service—17 January 1962)

Ad 62-01064. Amendments relating to maritime fisheries.

Morocco. Laws, Statutes, etc. (1961) M
8-03511
Bull. off. Emp. chérif., (2565) : 1831-2, 1855

Décision du président du conseil n° 3-199-61 du 13 décembre 1961 fixant les modalités de la péréquation du prix de la sardine destinée à la fabrication de la farine de poisson (Decision No. 3-199-61, fixing methods for the equalization of prices of sardines intended for the manufacture of fish meal—13 December 1961). *Fr Es*

Norway. Laws, Statutes, etc. (1961) M
8-03512
Norsk Lovtid., (23) : 669

Resolusjon om sentralisering av eksporten til de øst-europeiske markeder av annen fersk sild enn vintersild—30 juni 1961 (Royal resolution concerning the centralization of exports to the eastern European market in respect of fresh herring other than winter herring—30 June 1961). *No*

Norway. Laws, Statutes, etc. (1961) M
8-03513
Norsk Lovtid., (23) : 670

Resolusjon om overføring av eksporten av makrellmel fra fiskemelutvalget til sildemelutvalget—30 juni 1961 (Royal resolution transferring responsibility for mackerel-meal exports from the fish-meal commission to the herring-meal commission—30 June 1961). *No*

Norway. Laws, Statutes, etc. (1961) M
8-03514
Norsk Lovtid., (23) : 672

Skriv om ikrafttreden av res. om førstehåndsomsetning av fisk fra utenlandske fartøyer—30 juni 1961 (Notification concerning the entry into force of the resolution concerning the sale at first hand of fish by foreign fishing craft—30 June 1961). *No*

As of 1 Jul. 1961.

MISCELLANEOUS AND AUXILIARIES

Norway. Laws, Statutes, etc. (1961)

M
8-03515

Norsk Lovtid., (26) : 744

Resolusjon om bestem. om fiske med trål i området 6–12 nautiske mil innenfor fiskerigrensen—18 august 1961 (Resolution concerning net fishing in the zones between 6 and 12 nautical miles from the Norwegian fishing waters boundary—18 August 1961). *No*

Provisions of legislation concerning net fishing to apply in that zone.

Norway. Laws, Statutes, etc. (1961)

M
8-03516

Norsk Lovtid., (26) : 746

Resolusjon om adgang for danske og svenske fiskfartøyer til å drive fiske innenfor Norges fiskerigrense—18 august 1961 (Resolution authorizing Danish and Swedish fishing craft to fish in Norwegian fishing waters—18 August 1961). *No*

Exception to a general prohibition, and subject to compliance with Norwegian legislation.

Norway. Laws, Statutes, etc. (1961)

M
8-03517

Norsk Lovtid., (26) : 746

Resolusjon om endring av resolusjon om ikraftsetting av lov om Norges fiskerigrense—18 august 1961 (Resolution amending the resolution concerning the entry into force of the act on the Norwegian fishing waters boundary—18 August 1961). *No*

Ad 61-12943. Minor changes in the boundary line.

Norway. Laws, Statutes, etc. (1961)

M
8-03518

Norsk Lovtid., (26) : 747–8

Resolusjon ang. sjømannslovens anvendelse på fiske- og fangstfartøyer—18 august 1961 (Resolution in application of the act concerning sea-going personnel aboard fishing and whaling craft—18 August 1961). *No*

Medical expenses, etc., of such persons covered at state expense.

Norway. Laws, Statutes, etc. (1961)

M
8-03519

Norsk Lovtid., (31) : 816–7

Resolusjon om endr. av reglement for fangst av bardehval og spermhval—6 oktober 1961 (Royal resolution amending regulations concerning capture of whales and sperm whales—6 October 1961). *No*

Prohibits floating processing plants on fishing boats towed thereby to process whale-meat for preservation in any navigable waters.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Norway. Laws, Statutes, etc. (1961)

M
8-03520

Norsk Lovtid., (32) : 847

Bestem. om endr. i forskr. for merking av hermetisk nedlagte fiskevarer m.v.—9 oktober 1961 (Order amending provisions concerning the marking of preserved fish products—9 October 1961). No

The expressions "kippered herring" and "kippered snacks" may be used only for herring approved by the preserves industry control institute.

Norway. Laws, Statutes, etc. (1961)

M
8-03521

Norsk Lovtid., (35) : 902-11

Forskrifter for fredning av brisling og hermetisk nedlegging av brisling og småsild—13 november 1961 (Circular concerning the protection of sprats and the hermetic packaging of sprats and small herring—13 November 1961). No

Closed season on sprats from 1 Jan. to 31 May of each year. Detailed provisions governing processing of said fish. Replaces regulations of 18 Apr. 1955 on same subject.

Peru. Laws, Statutes, etc. (1961)

M
8-03522

Peruano, (6143) : 2

Resolución ministerial No. 2508 prohibiendo la pesca con aparejos de arrastre en la Bahía Independencia—4 de octubre de 1961 (Ministerial resolution No. 2508 prohibiting trawl fishing in Independencia Bay—4 October 1961)

In pursuance of general provisions prohibiting the use of dragging equipment in sea waters less than 20 fathoms deep.

Philippines. Laws, Statutes, etc. (1961)

M
8-03523

Off. Gaz., Manila, (46) : 8271-6

S. No. 541. Republic Act No. 3046: An act to define the baselines of the territorial sea of the Philippines—17 June 1961

Indicates latitude, longitude, distance, etc., of the said baselines. All waters around, between and connecting the various islands of the Philippine archipelago, irrespective of their width or dimension, are considered inland or internal waters of the Philippines.

Philippines. Laws, Statutes, etc. (1961)

M
8-03524

Off. Gaz., Manila, (46) : 8277

H. No. 766. Republic act No. 3048: An act prohibiting the operation of trawls in fishing areas seven fathoms deep or less—17 June 1961

MISCELLANEOUS AND AUXILIARIES

- Philippines. Laws, Statutes, etc.** (1961) M
8-03525
Off. Gaz., Manila, (45) : 8083-4
 Executive order No. 449 creating the president's committee on assistance to the fishing industry—14 October 1961

To promote the interest and the economic and social uplift of the small Filipino fishermen.

- Anon.** (1962) M
8-03526
J. Fish. Res. Bd Can., 19 (3) : 513-4
 Alexander Henry Leim 1897-1960

Obituary.

- South Africa. Republic of. Laws, Statutes, etc.** (1961) M
8-03527
Govt Gaz. S. Afr., (138) : 5
 Proclamation No. 169, 1961, made under the sea fisheries act, 1940 (Act No. 10 of 1940)—5 December 1961. *En Af*

Prohibits the capture or disturbing of rock lobster, *Jasus lalandii*, from 1 Sep. to 31 Oct. of each year.

- Anon.** (1962) MF
8-03528
Copeia, (2) : 484-5
 Editorial notes and news—Translations

Announcements of formation of bibliographic file of translations into English of literature on aquatic animals, fisheries, and marine biology, at US Bureau of Commercial Fisheries, Seattle.

- The Council for Nature, London** (1962) MF
8-03529
 Mimeo, 17 p.
 A list of 16 mm. films on natural history subjects—Part 2 : Africa, Asia, Australasia, America and Antarctica

Co 62-06824. List of distributors, and of films under general subject headings.

- Ratcliffe, H. L.** (1962) MF
8-03530
Science, 137 (3529) : 550-2
 Comparative pathology: an opportunity for biologists?

Reports a conference of staff of US and some other faculties of medicine and veterinary science and US National Institute of Health. Incl. reference to iodine deficiency in hatchery fish, endocrine control of Pacific salmon maturation ; observational records and facilities of Penrose Research Laboratory of the Zoological Society of Philadelphia.

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New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (2) : 3 8-03531

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to portion of waters of Hastings River, County of Macquarie—13 December 1961

Prohibits the taking of fish by nets of every description in the specified tidal and inland waters from 1 Feb. 1962 to 31 Jan. 1967.

New South Wales. Laws, Statutes, etc. (1961) MF
Govt Gaz. N.S.W., (2) : 4 8-03532

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Clarence River, County of Clarence—13 December, 1961

Prohibits the taking of fish and prawns by trawl nets of every description, in the specified tidal waters, from 1 Feb. 1962 to 31 Jan. 1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (14) : 361 8-03533

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the tidal waters of Cudgara, Mooball and Cudgen Creeks, County of Rous—24 January 1962

Rescinds the proclamations of 22 May 1957, 3 Sep. 1958 and 17 Sep. 1958. Prohibits, in the specified waters, the taking of fish by (a) nets of every description, (b) spears, spear-guns and similar devices, from 2 Feb. 1962 to 1 Feb. 1967.

Canada. Laws, Statutes, etc. (1961) MF
Can. Gaz. (II), (23) : 1729-35 8-03534

SOR/61-513. Order in council P.C. 1961-1678 relative to the Yukon territory fishery regulations made under the fisheries act—23 November 1961

The previous regulations of 31 Mar. 1954, as amended, are revoked. The new regulations deal with licences, domestic use fishery, commercial fishery, fishery closures, prohibitions, etc.

Canada. Laws, Statutes, etc. (1961) MF
Can. Gaz. (II), (23) : 1806-12 8-03535

DORS/61-513. Décret C.P. 1961-1678: Règlement de pêche du territoire du Yukon, selon la loi sur les pêcheries—23 novembre 1961 (SOR/61-513. Order in council P.C. 1961-1678 relative to the Yukon territory fishery regulations made under the fisheries act—23 November 1961)

Fr 8-03534.

MISCELLANEOUS AND AUXILIARIES

Ceylon. Laws, Statutes, etc. (1962)

MF
8-03536

Ceylon Govt Gaz., (12,885) Pt. 1, Sect. 1: 212

L.D.-B.20/41. Regulation amending the Galle fishing regulations, 1955, as amended, made under the fisheries ordinance—17 January 1962

Various amendments in respect of definition of fishing craft.

Ceylon. Laws, Statutes, etc. (1962)

MF
8-03537

Ceylon Govt Gaz., (12,895) Pt. 1, Sect. 1: 269-70

Food price order No. C 340, made under the control of prices act No. 23 of 1950, relating to dried fish and dried prawns—3 February 1962

Revokes food price order No. C 315, of 23 Jun. 1961, and fixes maximum wholesale and retail prices.

Chile. Laws, Statutes, etc. (1960)

MF
8-03538

Diario ofic., Santiago, (24,900) : 532-6

Decreto número 937 aprobando el reglamento orgánico para la dirección de agricultura y pesca—22 de diciembre de 1960 (Decree No. 937, regulating the organization and responsibilities of the Directorate of Agriculture and Fisheries—22 December 1960)

Lays down in detail the functions of the Fisheries and Game Department.

Denmark. Laws, Statutes, etc. (1961)

MF
8-03539

Lovtidende A, (29) : 967

Bekendtgørelse Nr. 381 om indførsel af varer m.v.—21 december 1961 (Notice No. 381 concerning the importation of certain goods—21 December 1961). *Da*

Including, *inter alia*, certain fisheries products.

Denmark. Laws, Statutes, etc. (1962)

MF
8-03540

Lovtidende A, (1) : 21-30

Bekendtgørelse Nr. 6 om fremstilling af hel- og halvkonserves af fisk—10 januar 1962 (Notice No. 6, concerning the production of preserves and semi-preserves of fish—10 January 1962). *Da*

Detailed provisions covering a wide variety of fish products.

Ecuador. Laws, Statutes, etc. (1960)

MF
8-03541

Reg. ofic. Ecuador, (105) : 570-4

Decreto legislativo No. 582-a creando el instituto nacional de la pesca—5 de diciembre de 1960 (Executive decree No. 582-a establishing the national fisheries institute—5 December 1960)

Fixes its composition and prescribes its functions. Includes by reference the plan of operations signed on 2 Jun. 1960 by the government of Ecuador, the Special Fund of the United Nations and FAO.

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France, Laws, Statutes, etc. (1961)

8-03542

J. off. Répub. franç., (274) : 10716

Loi No. 61-1243 du 21 novembre 1961 tendant à interdire la vente des salmonidés sauvages (Act No. 61-1243, prohibiting the sale of wild Salmonidae—21 November 1961)

Adds a new art. 439-2 to the rural code. Exceptions granted under stated conditions.

MF

France, Laws, Statutes, etc. (1961)

8-03543

J. off. Répub. franç., (307) : 12418-93

Décret No. 61-1517 du 30 décembre 1961 modifiant les tarifs des droits de douane d'importation (Decree No. 61-1517, amending the import duty tariff—30 December 1961)

Major revision of the tariff, covering also fish and fish products.

MF

Guadeloupe, Laws, Statutes, etc. (1962)

8-03544

Rec. Actes adm. Guadeloupe, (8) : 104-7

Arrêté No. 62-172 du 24 janvier 1962, portant réglementation des prix des poissons et crustacés dans le département de la Guadeloupe (Order No. 62-172 regulating the price of fish and crustaceans in the Guadeloupe department—24 January 1962)

In respect of retail sale.

MF

India, Laws, Statutes, etc. (1962)

8-03545

Gaz. India, (2) Pt. 1, Sect. 1 : 3

Public notice No. 2-ITC (PN)/62 relative to movement of goods from and to Goa, Daman and Diu—1 January 1962

Restrictions on the movement of various products, including fish, fresh, salted or dried, and fish manioc from these territories to the rest of India have been lifted.

MF

Kerala, Laws, Statutes, etc. (1962)

8-03546

Kerala Gaz., (6) Pt. 1 : 311

Notification No. 90730/61/B1/H and LD, relating to exemptions under rule 10 of the Kerala prevention of food adulteration rules 1957—1 January 1962

Exempts certain products, including fish, from the operation of the said rule.

MF

Kerala, Laws, Statutes, etc. (1962)

8-03547

Kerala Gaz., (6) Pt. 6 : 320-1

Order G.O.MS. 85/62/Agri. prescribing rules for the grant of subsidy for freezing factories—18 January 1962

Subsidy to private parties for establishing freezing factories, for fish and fish products only.

MISCELLANEOUS AND AUXILIARIES

Mexico. Laws, Statutes, etc. (1961)

MF
8-03548

Diario ofic., Méx., (39) : 2-3

Decreto por el que se crea, con carácter permanente, la comisión nacional consultativa de pesca—8 de diciembre de 1961 (Decree creating, on a permanent basis, the national advisory commission on fisheries—8 December 1961)

To advise the industry and trade ministry on matters relating to fisheries.

Morocco. Laws, Statutes, etc. (1961)

MF
8-03549

Bull. off. Emp. chérif., (2566 bis) : 1895-903, 1919-28

Dahir n° 1-61-444 du 30 décembre 1961 substituant une taxe sur les produits et une taxe sur les services à la taxe sur les transactions (Dahir No. 1-61-444, substituting a production tax and a service tax for the transactions tax—30 December 1961). *Fr Es*

Section 11 provides for exemptions for certain products including fish.

Netherlands. Laws, Statutes, etc. (1961)

MF
8-03550

Staatsblad, Den Haag, (428-432) : 955-6

Besluit 432 van 12 december 1961, houdende wijziging VI van het in- en uitvoerbesluit landbouwprodukten 1958 (Decree amending the decree of 1958 concerning the import and export of agricultural products—12 December 1961). *Ne*

In respect of various fisheries products, etc.

Philippines. Laws, Statutes, etc. (1961)

MF
8-03551

Off. Gaz., Manila, (48) : 8652

Fish and game administrative order No. 48-A amending section six of fisheries administrative order No. 48, regulating employment of foreign technicians in fisheries—2 October 1961

In the following subject fields: fishing methods, fish and shellfish culture, fish processing, net manufacturing, fishing boat designing and construction, aircraft based on marine products.

FAO Fisheries Division (1962)

MF
8-03552

World Fish. Abstr., 13 (4)

Fr and Es version issued separately. Contains informative abstr. of Nos. 60-0590, 61-04453, 61-06829, 61-09573, 61-09574, 61-11063, 61-13283, 61-13655, 62-01413, 62-01993, 62-02032, 62-02151, 62-03762, 62-04271, 62-05379, 62-05444, 62-05910, 62-06130, 62-02361, 8-03241 to 8-03258, 8-03268, 8-03269, 8-03270, 8-03274 to 8-03324, 8-03432, 8-03431, and technological notes under headings: Bait—natural—for pots; Fish oil—use—for technical purposes; Fisheries, research vessels—submarine; Oceanography—temperature measurements; Pearls—examination; Marine, fouling—prevention; Salting fish—mechanical; Shellfish culture—crustaceans—shrimp; Tuna—spoilage—green discoloration.

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FAO Fisheries Division (1962)
World Fish. Abstr., 13 (3)

MF
 8-03553

Fr and *Es* version issued separately. Contains informative abstr. of Nos. 60-1447, 60-1453, 60-2607, 60-8607, 61-03322, 61-04622, 61-04695, 61-04809, 61-06766, 61-09312, 61-09609, 61-11066, 61-13085, 61-13167, 61-13171, 61-13175, 61-13176, 61-13502, 62-00444, 62-01573, 61-01575, 61-02022, 62-02605, 62-04351, 62-04842, 62-05412, 62-05426, 62-05875, 62-06613, 62-06565, 62-06574, 62-06309, 8-01003, 8-01267, 8-03271, 8-03259, 8-03126, 8-03261, 8-03262, 8-03263, 8-04198, 8-04228 to 8-04245, 8-04283 to 8-04288, 8-04300 to 8-04372, 8-04377 to 8-04380, 8-04524, and technological notes under headings: Bait—live; Factory ships; Fish culture—anadromous species; Fish culture—hybridization; Fishing—methods and gear—auxiliary equipment for net fishing; Fishing—tunas, mackerels, etc.—tunas: Cold storage warehouses—sanitation.

de Sylva, D. P. (1962)
Copeia, (1) : 240-1
 Reviews and comments

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Re 1955 Romanov, N. S., 60-3507 and 60-8641.

Canada. Laws, Statutes, etc. (1961)
Can. Gaz. (II), (23) : 1722-28

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 8-03555

SOR/61-512. Order in council P.C. 1961-1677 amending the Northwest Territories fishery regulations made under the fisheries act—23 November 1961

Concerns commercial fishing licences, fishing in Great Slave Lake, division of the northwest territories into control areas, etc.

Canada. Laws, Statutes, etc. (1961)
Can. Gaz. (II), (23) : 1798-805

F
 8-03556

DORS/61-512. Décret C.P. 1961-1677 modifiant le règlement de pêche des territoires du nord-ouest, en vertu de la loi sur les pêcheries—23 novembre 1961 (SOR/61-512. Order in council P.C. 1961-1677 amending the Northwest Territories fishery regulations made under the fisheries act—23 November 1961)

Fr 8-03555.

Colombia. Laws, Statutes, etc. (1961)
Diario ofic., Bogotá, (30673) : 578-9

F
 8-03557

Resolucion No. 0002 reglamentando la pesca de la trucha con carácter comercial—2 de enero de 1961 (Resolution No. 0002 regulating commercial trout fishing—2 January 1961)

With a view to protecting the species, production, sale and marketing are made subject to a licence.

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8-03558

Greece. Laws, Statutes, etc. (1960)
Ephem. Kybern., I (177) : 1870-1

B. diatagma up'arith. 722 peri emploutismon kai prostasias hydrobion Zoon limnon kai potamon (Royal decree No. 722, for the development and protection of the fish population of lakes and rivers—29 October 1960). *He*

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Finland. Laws, Statutes, etc. (1961)
Finl. FörfattnSaml., (306-311) : 566

Lantbruksministeriets beslut N:o 311 om förbud mot fiske i Ijo älv.—3 juni 1961 (Resolution No. 311 on the prohibition of fishing in the River Iijoki—3 June 1961). *Su*

F
8-03560

Luxembourg. Laws, Statutes, etc. (1962)
Mém. Luxemb., (6) : 130

Règlement ministériel du 23 janvier 1962 concernant le régime de la pêche dans les eaux indigènes (Ministerial regulation relative to fisheries in inland waters—23 January 1962)

Forbids fishing and the leasing of fishing rights in certain watercourses.

F
8-03561

Madagascar. Laws, Statutes, etc. (1962)
J. off. Répub. malgache, (206) : 168

Arrêté n° 200-MAP/FOR portant interdiction de la pêche au black-bass dans les étangs réservoirs de la Sahamamy et de la Sahamaloto—22 janvier 1962 (Order No. 200-MAP/FOR prohibiting black-bass fishing in the fish-ponds of Sahamamy and Sahamaloto—22 January 1962)

For a two-year period.

F
8-03562

Netherlands. Laws, Statutes, etc. (1962)
Staatscourant, Den Haag, (23) : 7

VI. 224/directie van de visserijen ontheffing van bepalingen riviervisserij reglement—29 januari 1962 (Order No. VI. 224, granting exemption from certain provisions of the river fishing regulations—29 January 1962). *Ne*

Fishing of tench authorized during 1962.

F
8-03563

Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)
Sth. Rhod. Govt Gaz., (6) : 5 p.

S.R. government notice No. 73 of 1962 relating to the fish conservation (Kariba controlled fishing area) regulations. 1962. made under the fish conservation act, 1960 (Act 44/60)

Under sections 7 and 35 of the above act, it is an offence to fish in the said area except in accordance with the terms and conditions prescribed in detail in the regulations.

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8-03564

Circ. U.S. Fish Wildl. Serv., (116) : 21 p.

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A guide to their preparation.

Whittaker, R. H. (1962)

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8-03565

Bot. Rev., 28 (1) : 239 p.

Classification of natural communities

A review, and an attempt to provide a current understanding of the classification of natural communities containing extensive bibliography.

Godwin, H. (1962)

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Nature, Lond., 195 (4845) : 943-5

Radiocarbon dating—Fifth international conference

No 61-355me.

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8-03567

Nature, Lond., 195 (4845) : 984

Half-life of radiocarbon

Ci 61-355me. Text of and comment on resolution concerning new determinations for C₁₄, important in dating research.

Ash, R. & E. O. Powell (1962)

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8-03568

Nature, Lond., 195 (4843) : 770-2

A singly terminated frequency function with three parameters

Describes family of 3 parameter curves of use in treatment of biological data. Fitted to bacteria generation times.

Taub, A. M. (1962)

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8-03569

Copeia, (1) : 209-10

The use of paraformaldehyde as a field preservative

Neal, J. T. (1962)

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GeoTimes, 7 (1) : 14-5, 41

Remote sensing of environment—A challenge to the earth scientist

Lumsden, W. H. R. (1962)

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Nature, Lond., 195 (4847) : 1139-41

Organization and orientation of applied research in under-developed areas

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Symp. Inst. Biol., Lond., (9) : 116 p. 8-03572
Biological problems arising from the control of pests and diseases

Proceedings of 1959 symposium. General background to subject but no specific reference to pesticide residues in water or effects on aquatic life.

IAEA (1962)* G
Saf. Ser. int. atom. Energ. Ag., (1) 8-03573
Safe handling of radioisotopes

Heywood, V. H. (1961) G
New Phytol., 60 (3) : 401-3 8-03574
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Parts 1-4

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Es 62-05722.

- Lucas, C. E.** (1963) M
8-04003
FAO Fish. Biol. tech. Pap., (33) : 6 p.
International collaboration in fisheries research. A historical review with particular reference to the North Atlantic region

Provides background experience to assist in developing international projects in other regions.

- Commission for Maritime Meteorology. Working Group on the Relations with the International Fisheries Organizations** (1961) M
8-04004
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Report by the Chairman of the Working Group on the Relations with the International Fisheries Organizations

- Maurin, C.** (1961) M
8-04005
Proc. gen. Fish. Coun. Medit., 6 : 289

Campagne du 'Président Theodore Tissier' sur les côtes d'Algérie, novembre 1959-février 1960 (Campaign of the 'President Theodore Tissier' off the Algerian coasts, November 1959-February 1960). En

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France. Institut Scientifique et Technique des Pêches Maritimes (1961)

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8-04007

Sci. et Pêche, (97) : 9 p.

Compte-rendu des travaux exécutés par le 'Roselys' et la 'Thalassa' dans le cadre du plan de relance de la pêche en 1961 (Report of the work carried out by the 'Roselys' and the 'Thalassa' within the fisheries plan in 1961)

Results of research on sardines, albacore, tuna, lobster and scallops.

Sparre, T. (n.d. 1962)

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Pesca, Lima (Yearb.), 1961-1962 : 49-56

El estudio de los recursos marinos (The study of marine resources)

Summary of the research program of the Marine Resources Research Institute of Peru.

Anon. (1962)

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8-04009

Norweg. Fish. marit. News, 9 (1) : 9-13

The Indo-Norwegian project in Kerala

A review of the project.

Anon. (1962)

M

8-04010

Mar. Obs., 32 (196) : 86-7

The national oceanographical council—annual report

Mathieu, R. & P. Rogers (1962)

M

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Mar. Obs., 32 (196) : 73-6

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Historical review of the work of the World Meteorological Organization.

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Rapp. sci. Inst. franç. Océan., (21) : 41 p.

Resultats des observations scientifiques du 'Tiare'. Croisière 'Entrecasteaux'—11-24 août 1960—sous le commandement du Lieutenant de Vaisseau Cerbelaud (Results of scientific observations of the 'Tiare'. Cruise 'Entrecasteaux'—11-24 August 1960—under the command of Lieutenant de Vaisseau Cerbelaud)

Data, temperature, salinity, density and currents.

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Sea Frontiers, 8 (2) : 66-7
Man or robot?

Note on unmanned underwater vehicles.

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Ocean exploration by machine

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Norweg. Fish. marit. News, 9 (3) : 7-8

World-wide expansion of tuna research

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The position of the Food and Agriculture Organization with respect to water pollution control

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Donn, W. L., W. F. Farrand & M. Ewing (1962)

8-04048

J. Geol., 70 (2) : 206-14

Pleistocene ice volumes and sea-level lowering

Provides revised estimates of such ice volumes and resulting sea level lowering. Issued also as: *Contr. Lamont geol. Obs.*, (524).

M

Knight, C. A. (1962)

8-04049

J. Geol., 70 (2) : 240-6

Polygonization of aged sea ice

Illustrated description of the structure of sea ice at various ages and inferences regarding the strength of sea ice. Issued also as: *Contr. Univ. Wash. Dep. Met. Clim.*, (58).

M

Wangersky, P. J. (1962)

8-04050

J. Geol., 70 (3) : 364-75

Sedimentation in three carbonate cores

Two cores from the mid-Atlantic and one from the Caribbean were analyzed for their major constituents. Estimates were made of the rates of deposition of several constituents (i.e., aluminium, magnesium, silicate, CaCO_3 , iron, titanium and manganese x). Data for the analytical results are presented.

- Berman, A.** (1962) M
8-04051
J. acoust. Soc. Amer., 34 (3) : 298-304
 Effect of rough surfaces on the resolution of acoustic rays in the ocean

The effect of boundary scattering on the resolution of ray paths for frequencies less than 1 kc/s is investigated.

- Neubauer, W. G.** (1962) M
8-04052
J. acoust. Soc. Amer., 34 (3) : 312-8
 Sound sources and probes for the measurement of pulsed acoustic waves in water

60 kc/s and 1 mc/s acoustic transmission and reflection experiments performed in a controlled water medium in a laboratory tank.

- Vchupi, E.** (1961) M
8-04053
J. sediment. Petrol., 31 (4) : 534-45
 Submarine geology of the Santa Rosa-Cortes Ridge

The area considered, the most prominent topographic high in the submerged basin and range province off southern California, is a structural expression limited by inferred faults. Bedrock is mostly Eocene and Miocene detrital sedimentary rocks. Sediments are predominantly calcareous with considerable detrital admixture. Present characteristics are attributed to Pleistocene erosion and deposition, and post-Pleistocene deposition.

- Riley, C. M. & J. V. Byrne** (1961) M
8-04054
J. sediment. Petrol., 31 (4) : 553-9
 Genesis of primary structures in anhydrite

Rock anhydrite, formed of aggregates of aligned acicular crystals, is classified into six structural types. Five types appeared in models. The experiments suggest that crystal alignment and structures are due to flowage produced by density differences when sediment is plastic and support the theory of primary marine formation of anhydrite.

- Moretti, F.** (1959) M
8-04055
Atti Ist. veneto, 117 : 291-306
 Le maree nell'Adriatico (The Adriatic tides). *It*

Theories and data. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (354).

- Chierago Meng, N. & D. Bregant** (1959) M
8-04056
Boll. Soc. adriatic. Sci. nat., 50 : 1-10

Analisi chimica e spettrografica preliminare di un campione di fondo dell'Adriatico centrale (Preliminary results of the chemical and spectrographical analysis of a sea-bottom sample of the central Adriatic Sea). *It*

Sample collected at about 218 m depth in the centre of the Adriatic Sea pit using a Kullenberg-type piston core. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (358).

- Chierago Meng, N. & M. Picotti** (1960) M
8-04057
Arch. Oceanogr. Limnol., Venezia, 11 (3) : 421-4

Crociera talassografica adriatica 1955-4. La distribuzione del rame nelle acque dell'Adriatico (Adriatic talassographic cruise 1955-4. The copper distribution in the waters of the Adriatic Sea). *It En*

Uniform concentration but for the Adriatic pit where an exceptionally low concentration was found. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (362).

- Ferraro, S.** (1960) M
8-04058
Pubbl. Ist. talassogr. Trieste, (367) : 19 p.

Tabelle di previsione delle maree per Trieste e per l'Adriatico settentrionale per l'anno 1961 (Tide prediction tables for Trieste and the northern Adriatic Sea for the year 1961). *It*

- Boffi, V. & A. Boffi-Lucarelli** (1962) M
8-04059
Boll. Soc. ital. Biol. sper., 37 (24 bis) : 1821-3

Prime ricerche sulla sostanza organica dissolta nel mare per lo studio della contaminazione radioattiva (First researches on the organic substances dissolved in the sea for the study of radioactive pollution). *It*

Qualitative and quantitative determinations of the carbohydrates in seawater and their metabolism.

- Polli, S.** (1961) M
8-04060
Pubbl. Ist. talassogr. Trieste, (382) : 20 p.

Tabelle di previsione delle maree per Trieste e l'Adriatico settentrionale per l'anno 1962 (Tide prediction tables for Trieste and the northern Adriatic Sea for the year 1962). *It*

- Polli, S.** (1961) M
8-04061
Pubbl. Ist. talassogr. Trieste, (385) : 7 p.

La propagazione della marea nel golfo di Venezia (Tide propagation in the gulf of Venice). *It*

Importance of the seiches in the propagation of the tide in abnormal meteorological conditions.

- Vatova, A.** (1960) M
8-04062
Nova Thalassia, 2 (9) : 1-59

Condizioni idrografiche e fasi di marea nell'alta laguna veneta (Hydrographic conditions and tidal phases in the high Venetian Lagoon). *It Fr En De*

Tables with physico-chemical data and relations between hydrographic conditions and tidal phases.

- Faganelli, A.** (1962) M
8-04063
Boll. Pesca. Piscic. Idrobiol., 15 (2) : 152-70
 La metodica per la determinazione dei sali nutritivi adottata durante le crociere dell'Anno Geofisico Internazionale (Methods used for the determination of nutrient salts during the I.G.Y. cruises in the Mediterranean Sea). It Fr En
- Estoques, M. A.** (1962) MG
8-04064
J. Atmos. Sci., 19 (3) : 244-50
 The sea breeze as a function of the prevailing synoptic situation
 Presents a mathematical model of sea breeze circulation. Issued also as: *Contr. Hawaii Inst. Geophys.* (31).
- Carozzi, A. V.** (1962) MF
8-04065
J. sediment. Petrol., 32 (1) : 148-9
 Der Porenraum der Sedimente (The pore space in sediments)
 Re 8-04026. Discussion of theoretical aspects of porosity and its determination; diffusion, permeability, and flow in pore space; and the contents of pore space (saline solutions, oil and natural gas) with extensive recent bibliography.
- Grim, R. E. & F. C. Loughnan** (1962) MF
8-04066
J. sediment. Petrol., 32 (2) : 240-8
 Clay minerals in sediments from Sydney Harbour, Australia
 Discussion of these estuarine sediments and chemical changes induced by sea water.
- Wulf, G. R.** (1962) MF
8-04067
J. sediment. Petrol., 32 (2) : 327-9
 Eroded oscillation ripple marks in cretaceous Newcastle sandstone, Wyoming and South Dakota
 Relates asymmetric and flat-topped ripple marks to tidal action just prior to burial.
- Butzer, K. W. & J. Cuerda** (1962) MF
8-04068
J. Geol., 70 (4) : 398-416
 Coastal stratigraphy of southern Mallorca and its implications for the pleistocene chronology of the Mediterranean Sea
 Detailed geomorphologic, stratigraphic and palaeontologic investigations on the southern littorals of this central Mediterranean island related to glaciostatic regression intervals of the Pleistocene.

Magarvey, R. H. & J. W. Geldart (1962)

MF
8-04069

J. atmos. Sci., 19 (1) : 107-13

Drop collisions under conditions of free fall

The results of photographic observations on forced collisions between water droplets is related to the possible importance of collisions upon drop size distribution of natural rain.

Obrien, V. (1961)

MF
8-04070

J. Met., 18 : 549-52

Why raindrops break up: vortex instability

Blanchard, D. C. (1962)

MF
8-04071

J. atmos. Sci., 19 (1) : 119-20

Comments on the break-up of raindrops

Re 8-04070. Critical comment on a recent explanation for the break-up of raindrops.

Obrien, V. (1962)

MF
8-04072

J. atmos. Sci., 19 (1) : 120.

Reply

Re 8-04071.

Petit, G. & R. Mizoule (1962)

MF
8-04073

Vie et Milieu, 13 (2) : 205-30

Contribution a l'étude écologique du complexe lagunaire Bages-Sigean (Aude) (Contribution to the ecological study of the lagoon complex Bages-Sigean (Aude))

Topography, hydrography, meteorology, hydrology, sedimentology.

Siever, R. (1962)

MF
8-04074

J. Geol., 70 (2) : 127-50

Silica solubility, 0°-200°C, and the diagenesis of siliceous sediments

Explains diagenetic changes in silica content of sediments and reviews data on solubility of amorphous silica and quartz.

Maher, S. W. (1962)

F
8-04075

J. sediment. Petrol., 32 (1) : 138-9

Primary structures produced by tadpoles

Observations on polygonal interference ripple marks produced in silty sediment by the thrashing actions of tadpoles.

F

8-04076

Loughnan, F. C. (1962)

J. sediment. Petrol., 32 (2) : 284-90

Some considerations in the weathering of the silicate minerals

The weathering of silicate minerals is a function of the parent mineral structure and mobility of the essential cations. In the normal pH range of 4 to 10 the amount of water leaching through the mineral is the major factor influencing cation mobility, although the redox potential markedly influences the solubility of iron.

F

8-04077

Carson, C. E. & K. M. Hussey (1962)

J. Geol., 70 (4) : 417-39

The oriented lakes of Arctic Alaska

Extensive theoretical consideration of the processes producing the marked alignment of elongate lakes of the Alaskan Arctic coastal plain.

F

8-04078

Sourie, R. (1962)

Vie et Milieu, 13 (2) : 333-40

L'évolution du système acide carbonique-bicarbonate-carbonate de calcium et l'amélioration de certaines eaux de pisciculture (Evolution of the system carbonic acid-bicarbonate-carbonate of calcium and the improvement of certain fishculture waters)

F

8-04079

Antevs, E. (1962)

J. Geol., 70 (2) : 194-205

Transatlantic climatic agreement versus C¹⁴ dates

Examines the hypothesis that the main, late, glacial ice ages occurred at about the same times in Europe and North America.

F

8-04080

Figura, V. (1962)

Boll. Pesca Piscic. Idrobiol., 15 (2) : 237-45

Osservazioni sulle correnti del lago Sabatino o di Bracciano (Observations on the currents in lake Sabatino or Bracciano). *It Fr En*

Existence of a deep current and of a 'little current' in the mud-water and on its surface; decreases near the shore. Studies on the factors which may cause these currents.

F

8-04081

Gianotti, F. S. (1959)

Boll. Zool., 26 : 590-600

Apporti di carico biologico attraverso la nuova adduzione di acque al lago Trasimeno (Biological charges carried out in the Trasimenus Lake through the new artificial tributary). *It En*

Deductions as to the possible future of the amount of animal and vegetal quota in the biological charge in the lotic-lentic type water system constituted by the lake and Angiullara canal, after the hydraulic works are finished.

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Di Giovanni, M. V. (1959)

Boll. Zool., 26 : 615-36

Esponenti endofitici, epifitici e fitosaprobi del lago Trasimeno: facies autunnale (Hydrophytic colonies in lake Trasimeno: autumnal facies). *It*

Calls attention to the increasing and undoubted stagnation of the lake within the last few decades.

Bramer, H. C. & M. J. Walsh (1962)

ISA J., 9 (9) : 96-7

Temperature compensation for oxygen measuring

Applications of methods in monitoring effluents and surface streams for pollution control purposes.

Bull, W. B. (1962)

J. sediment. Petrol., 32 (2) : 211-6

Relation of textural (CM) patterns to depositional environment of alluvial-fan deposits

Logarithmic plots of the coarsest 1-percentile grain size (C) and the median grain size (M) of alluvial-fan deposits make distinctive patterns for samples from central California.

Nayudu, Y. R. (1962)

J. sediment. Petrol., 32 (2) : 326-7

Rapid method for studying silt-size sediments and heavy minerals by liquid immersion

Issued also as: *Contr. Univ. Wash. Dep. Oceanogr.* (272).

Siever, R. (1962)

J. sediment. Petrol., 32 (2) : 329-31

A squeezer for extracting interstitial water from modern sediments

Detailed description and illustration of a manually operated and a gas operated filter press.

Friedman, G. M. (1961)

J. sediment. Petrol., 31 (4) : 514-29

Distinction between dune, beach and river sands from their textural characteristics

Four textural characteristics of sediments which can be expressed as statistical parameters were studied; first moment (mean), third moment (skewness), fourth moment (kurtosis), and standard deviation. 267 assorted sediment samples indicated that these parameters can characterize specific types of environments. Variations in parameters are due to modes of transport and "competency" of the medium of transport.

PLANKTON

G

8-04088

Porter, J. J. (1962)

J. sediment. Petrol., 32 (1) : 124-35

Electron microscopy of sand surface texture

Electron photomicrographs of sand grains are used to indicate processes which affected them. The method is discussed and a classification of surface textures suggested. The five classes are abraded (chipped or ground), lobate (cobbled appearing), corroded (solution pitted), smooth, and faceted (associated with crystallinity). Textural groups and grain size seem related.

G

8-04089

McCammon, R. B. (1962)

J. Geol., 70 (4) : 453-65

Efficiencies of percentile measures for describing the mean size and sorting of sedimentary particles

G

8-04090

Robinson, S. M. (1962)

J. atmos. Sci., 19 (2) : 189-90

Computing wind profile parameters

Presents a numerical method for determining the three wind profile parameters: roughness length, zero point displacement, and surface stress. A FORTRAN language program for these calculations is available as a part of *Tech. Note Dep. Met. Univ. Wis.* (1).

G

8-04091

Kuo, H. L. (1962)

J. atmos. Sci., 19 (3) : 236-43

On the controlling influences of eddy diffusion on thermal convection

Time dependent solutions of the non-linear equations of thermal convection are obtained, including the effects of non-linear diffusion processes which have a controlling influence on thermal convection.

G

8-04092

Dumait, P. (1962)

C.R. Acad. Sci., Paris, 255 (14) : 1637-9

Le vibroséparateur et son emploi dans la concentration des pollens contenus dans les sédiments (The vibroseparator and its utilization for the concentration of pollen contained in sediments)

Brief note describing the method and equipment used.

PLANKTON

M

8-04093

Buljan, M. (1961)

Proc. Gen. Fish. Coun. Medit., 6 : 237-43

Some results of fertilization experiments carried out in Yugoslav marine bays. Fr

CR 61-00439.

- Vučetić, T.** (1961) M
8-04094
Proc. gen. Fish. Coun. Medit., 6 : 245-9
 Abundance of zooplankton compared with sardine catch in the central part of the eastern Adriatic. Fr

CR 61-00440.

- Grindley, J. R. & F. J. R. Taylor** (1962) M
8-04095
Nature, Lond., 195 (4848) : 1324
 Red water and mass-mortality of fish near Cape Town

High concentration of dinoflagellate *Gonyaulax polygramma* Stein, associated with another, *Prorocentrum micans* Ehrb., appeared in False Bay during March and early April 1962, resulting in mass-mortality of fish and marine invertebrates, when the dinoflagellates died in large numbers. Prof. N. Sapeika, Department of Pharmacology, University of Cape Town, carried out toxicity tests on fish, limpets, *Patella longicosta*, and black mussels, *Mytilus perna*, collected from affected area.

- Tokin, B. P.** (1961) M
8-04096
Dokl. Akad. Nauk SSSR, 141 (1) : 252-5
 (Regenerative ability of ctenophores). Ru

Describes results of experiments in 1959-60 on two Barents Sea spp. of *Bolinopsis* and *Beroe*.

- Tokin, B. P.** (1962) M
8-04097
Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1004-6
 Regenerative ability of ctenophores

En 8-04096.

- Mileikovskii, S. A.** (1962) M
8-04098
Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1109-12
 Assignment of two *Rostraria*-type polychaete larvae from the plankton of the Northwest Atlantic to species *Amphinome pallasii* Quatrefages 1865 and *Chloenea atlantica* McIntosh 1885 (Polychaeta, Errantia, Amphinomorpha)

En 62-03618.

- Horridge, G. A., D. M. Chapman & B. MacKay** (1962) M
8-04099
Nature, Lond., 193 : 899

Naked axons and symmetrical synapses in an elementary nervous system

IABS 26 (3) 6644. E.M. study of the neurones of *Aurelia* and *Cyanea*.

PLANKTON

- Bucalossi, G.** (1960) M
8-04100
Bull. Inst. océanogr. Monaco, (1189) : 40 p.

Étude quantitative des variations du phytoplancton de la baie d'Alger en fonction du milieu—novembre 1959 à mai 1960 (Quantitative study of the variations of phytoplankton in the bay of Algiers in relation to the environment—November 1959 to May 1960)

- Lacroix, G.** (1961) M
8-04101
Cah. Inform. Sta. Biol. Mar. Grande-Rivière, (8) : 131 p

Catalogue des échantillons de zooplancton du musée de la station de biologie marine de Grande-Rivière, 1951–1961 (Catalogue of samples of zooplankton of the museum of the marine biological station of Grande-Rivière, 1951–1961)

- von Koenigswald, G. H. R. et al.** (n.d. 1962) M
8-04102
New York, Elsevier Publ. Co., 450 p.
Evolutionary trends in Foraminifera

Collection of papers dedicated to I. M. van der Vlerk on occasion of his 70th Birthday. Contributors: T. Barnard (Great Britain), F. Brotzen (Sweden), Maria B. Cità-Sironi (Italy), C. W. Drooger (The Netherlands), C. O. Dunbar (U.S.A.), M. S. Glaessner (Australia), H. Hiltermann (Germany), L. Hottinger (Morocco), R. Lagaay (The Netherlands), H. J. MacGillavry (The Netherlands), A. Papp (Austria), P. Rat (France), D. M. Rauzer-Chernousova (U.S.S.R.), H. Schaub (Switzerland), A. H. Smout (Great Britain).

- Vatova, A.** (1962) M
8-04103
Ric. sci., (II B), 2 (1) : 44–51

Rapporti tra concentrazione di sali nutritivi e produttività delle acque lagunari (Relation between nutrient salt concentration and organic productivity in lagoon waters). *It Fr En De*

In the lagoons of Venice primary productivity during 1959–1960 was determined following the ¹⁴C method of Steemann Nielsen, suitably modified for this purpose. Tables with results.

- Crisafi, P.** (1959) M
8-04104
Boll. Zool., 26 : 41–7

Sulla *Oithona spinirostris* Claus (Copepoda, Cyclopoida) dello stretto di Messina (On *Oithona spinirostris* (Copepoda, Cyclopoida) of the strait of Messina). *It En*

Demonstrates that the male ascribed to this sp. belongs to another one.

Crisafi, P. (1959)

M

8-04105

Boll. Zool., 26 : 49-57

Sulla *Oithona helgolandica* Claus (Copepoda Cyclopoida) dello stretto di Messina (On *Oithona helgolandica* Claus (Copepoda, Cyclopoida of the straits of Messina). *It En*

Concludes that *Oithona similis* must be considered as synonym of *O. helgolandica* and that the specimen hitherto described as male of *O. helgolandica* belongs to another sp.

Crisafi, P. (1959)

M

8-04106

Boll. Zool., 26 : 69-74

Sul presunto dimorfismo sessuale del genere *Oithona* (Copepoda, Cyclopoida) e sulla sua posizione sistematica (On the presumed sexual dimorphism in the genus *Oithona* (Copepoda, Cyclopoida) and on its systematic position). *It En*

Calls attention to the lack of a true sexual dimorphism and herewith to the different systematical position.

De Cesaris Coromaldi, L. & E. Urbani (1959)

M

8-04107

Boll. Zool., 26 : 243-3

Attività enzimatiche in *Artemia salina* Leach diploide e tetraploide (Enzymatic activities in diploid and tetraploid *Artemia salina* Leach). *It De*

Demonstrates that some enzymes are influenced by the polyploid condition, while others show the same activity in the two biotypes.

Ghirardelli, E. (1959)

M

8-04108

Boll. Zool., 26 : 413-21

Osservazioni sulla corona ciliata nei chaetognati (Observations of the ciliate crown in chaetognaths). *It Fr*

Differences between benthonic and pelagic chaetognaths.

Battaglia, B. & L. Maleson (1959)

M

8-04109

Boll. Zool., 26 : 423-33

Ricerche sulla determinazione del sesso nel copepode *Tisbe gracilis* (T. Scott) (Researches on the sex-determination in the copepod *Tisbe gracilis* T. Scott). *It En*

Results of the experiments of inbreeding, outbreeding, selection towards increase of males and towards increase of females.

M

8-04110

Anichini, C. (1959)

Boll. Zool., 26 : 669-82

Risultati dei primi dodici mesi delle ricerche planetonologiche eseguite dall'istituto di zoologia di Cagliari sull'Anno Geofisico Internazionale (Results of the first twelve months of planktonic researches carried out by the zoological institute of Cagliari during I.G.Y.). *It En*

M

8-04111

Schreiber, B., L. Cavalca & E. Bottazzi-Massera (1959)

Boll. zool., 26 : 213-20

Ecologia degli Acanthari e la circolazione dello Sr nel mare (Ecology of Acantharia and Sr circulation in the sea). *It Fr*

These protozoans are able to accumulate Sr in their bodies and their importance is discussed with regard to the problem of circulation and capture of radioactive isotopes in the sea.

MF

8-04112

Genovese, S. (1962)

Atti Soc. pelor., 7 (3/4) : 269-271

Sul fenomeno dell'acqua rossa riscontrato nello stagno salmastro di Faro (Messina) (On the red-water phenomenon observed in the brackish pond of Faro, Messina). *It En*

Presence of a 'red-water' layer observed from April to July 1960.

F

8-04113

Hazelwood, D. H. (1962)

Thesis, Washington State University, 78 p.

Population dynamics of some freshwater zooplankton

DA 23 (2) : 756. Weekly samples taken during period, March 1959 to March 1961, from Kepple Lake, Washington, analyzed for number of *Daphnia schodleri*/l, *Diaptomus leptopus*/l, coefficient of effective light extinction, possible food, water temperature, dissolved oxygen, total alkalinity, and carbonate concentration. Photoperiod and linear time trends were also considered. The effects of various trace elements on population density and the effects of photoperiod and temperature upon HL/CL and TL/CL ratios of *Daphnia* were analyzed.

F

8-04114

Songeur, M. (1961)

Vie et Milieu, 12 (3) : 483-496

Un nouveau copépode psammique de Lorraine (A new interstitial copepod from Lorraine)

Describes *Parastenocaris psammica* n.sp. and its geographical distribution.

F

8-04115

Šrámek-Hušek, R. (1962)

Fauna ČSSR, 16 : 416 p.

Lupenonožci—Branchiopoda (Branchiopods). *Cs*

Moroni, A. (1962)F
8-04116*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 194-224

Il lago-serbatoio dei Paduli (Passo del Lagastrello-Val d'Enza)—Ricerche geomorfologiche e biologiche (The reservoir-lake of Paduli in Val d'Enza, northern Appennines; geomorphological and biological researches). *It Fr En De*

The main characteristics are: lack of a typical littoral or sublittoral fauna, lesser productivity of single zooplanktonic organisms, notable variation of the conformation of the biological cycles of Copepoda and Cladocera.

Merlo, S. (1959)F
8-04117*Boll. Zool.*, 26 : 383-96

Distribuzione e frequenza del plancton del lago di Garda (Distribution and frequency of plankton in the Garda Lake). *It En*

Monthly distribution from Feb. 1957 through Jan. 1958 and monthly frequencies of the main groups of zoo- and phytoplankton.

BENTHOS

Elroi, D. & B. Komarovsky (1961)M
8-04118*Proc. gen. Fish. Coun. Medit.*, 6 : 261-7

On the possible use of the fouling ascidian *Ciona intestinalis* as a source of vanadium, cellulose and other products. *Fr*

CR 61-00443.

Ghirardelli, E. (1961)M
8-04119*Proc. gen. Fish. Coun. Medit.*, 6 : 279-82

La pêche des mollusques céphalopodes et leur importance biologique et économique (Fishing of cephalopod molluscs and their biological and economic importance). *En*

CR 61-00466.

Komarovsky, B. & T. Edelstein (1961)M
8-04120*Proc. gen. Fish. Coun. Medit.*, 6 : 285-7

Preliminary survey of the microflora and microfauna occurring on experimental anti-fouling panels in the Kishon Harbour. *Fr*

CR 61-00448.

M
8-04121

Blake, J. W. (1962)
Thesis, Univ. of North Carolina, 62 p.

Preliminary characterization of oyster metabolites attractive to the predatory gastropod *Urosalpinx cinerea*

DA 23 (2) : 755. Metabolites of *Crassostrea virginica*, studied to characterize fraction which serves as an attractant for *Urosalpinx*. Biological assay to determine relative attractiveness of experimental solutions, carried out in spiral flow bioassay apparatus constructed so as to take advantage of the natural geo-, rheo-, and phototactic responses of the snails to facilitate their chemotactic orientation.

M
8-04122

Mayes, P. A. (1962)
Nature, Lond., 195 (4848) : 1269-70

Comparative investigations of the euryhaline character of *Littorina* and the possible relationship to intertidal zonation

Experiments with British spp. involving immersion in water of different salinities.

M
8-04123

Ivanov, A. I. (1962)
Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1044-5

Some data on the quantitative distribution and diminution in size of *Rapana bezoar* L. in eastern part of Black Sea and Kerch Strait

En 62-03661. First discovered in Black Sea in 1947 in region of Novorossiisk. Mollusk accidentally introduced from Pacific Ocean, where it is common off the shores of Japan, China, and the USSR. Is a carnivore, feeds on lamelibranchiate mollusks, and thus inflicts considerable damage on oyster and mussel banks. Investigation of stock and distribution of commercial mollusks in 1960 collected material, from 266 stations.

M
8-04124

Ivanov, A. I. (1961)*
Dokl. Akad. Nauk SSSR, 141 (4) : 991-3

(The extension of the distribution of *Rapana bezoar* L. and its penetration into the north-western part of the Black Sea). Ru

Ci 62-03661.

M
8-04125

Ivanov, A. I. (1962)
Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1113-4

The extension of the distribution of *Rapana bezoar* L. and its penetration into the north-western part of the Black Sea

En 8-04124. Ci 8-04123.

Mamkaev, Iu. V. (1961)

M
8-04126

Dokl. Akad. Nauk SSSR, 141 (6) : 1501-4

(A new representative of the gnathostomulids *Gnathostomula murmanica* sp. n.). *Ru*

In 1956 Ax described peculiar group of animals inhabiting marine sands and provisionally related to the turbellarians. Two genera and three spp. are known from sand in Kiel Bay, the North Sea, the Mediterranean Sea and the Indian Ocean. In July 1960, gnathostomulids were encountered on the coastal regions of Dal'nexelenets Bay in the Barents Sea (Eastern Murmansk, Dal'nee Zelentsy).

Mamkaev, Yu. V. (1962)

M
8-04127

Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1115-7

A new representative of the gnathostomulids *Gnathostomula murmanica* sp. n.

En 8-04126.

Moody, M. F. (1962)

M
8-04128

J. exp. Biol., 39 : 21-30

Evidence for the intraocular discriminations of vertically and horizontally polarised light by octopus

IABS 26 (2) 4095.

Lyutova, M. I. & N. L. Fel'dman (1960)

M
8-04129

Tsitologiya, 2 : 699-708

(Study of the adaptability of some marine algae to variations in temperature). *Ru*

IABS 26 (2) 4263. Methods of vital staining in *Fucus inflatus*, *Enteromorpha compressa* and *Porphyra* sp. showed that the organisms, after being kept at different temperatures for several hours had various ranges of thermostability.

Zaks, M. G. & M. M. Sokolova (1960)

M
8-04130

Tsitologiya, 2 : 448-53

(Role of potassium in adaptation of lug-worm tissues to hypotonic media). *Ru*

IABS 26 (2) 4293. Demonstrates that whole worm *Arenicola marina* is more highly resistant to harmful effects of hypotonic solution than its isolated tissues.

Young, J. Z. (1962)

M
8-04131

Phil. Trans. (B), 245 : 1-58

The retina of cephalopods and its degeneration after optic nerve section

IABS 26 (2) 4298.

- Chassard, C.** (1961) M
8-04132
C.R. Acad. Sci., Paris, 253 : 3076-7
 (Chromatic effects of ablation of the ocular stalks in the decapod crustacean *Hippolyte varians* Leach). *Fr*

IABS 26 (2) 4299.

- Drach, P. & M. Gabe** (1962) M
8-04133
C.R. Acad. Sci., Paris, 254 : 165-7
 (Cyclic evolution of neurosecretion in the X organs of caridids—crustacea—during the intermoult). *Fr*

IABS 26 (2) 4300.

- Shirmunskiy, A. V.** (1960) M
8-04134
Tsitologiya, 2 : 675-89
 (Study of temperature adaptations in invertebrates from South China Sea). *Ru*

IABS 26 (2) 4307.

- Wainwright, B. A.** (1962) M
8-04135
Experientia, 18 : 18-9
 An anthozoan chitin

IABS 26 (2) 4310. Major constituent of skeleton of the Hawaiian reef coral, *Pocillopora damicornis* L., is chitin.

- Howie, D. I. D.** (1961) M
8-04136
Nature, Lond., 192 : 1100-1
 Spawning mechanism in the male lug-worm

IABS 26 (2) 4314. Emission of gametes in *Arenicola marina* involves primarily a change associated with their maturation so that they can be accepted by the ciliated funnels of the nephromixia.

- Alfimov, N. N. & A. I. Proshkina-Lavrenko** (1961) M
8-04137
Dokl. Akad. Nauk SSSR, 136 : 230-2
 (Biology and biochemistry of *Cladophora siwaschensis* Meyer). *Ru*

IABS 26 (2) 4262. Keeping *Cladophora* in sea water of various concentrations affected its morphology, mineral salt and vitamin content.

- M
8-04138
- Allen, J. R. L. & J. W. Wells** (1962)
J. Geol., 70 (4) : 381-97

Holocene coral banks and subsidence in the Niger delta

Extensive series of echograms of the Nigerian continental shelf. Distribution of buried and exposed dead coral assemblages related to downwarping and sea level changes at the time of their development. The coral banks, dominated by *Madracis asperula* and *Dendrophyllia ramea*, were dated from $2,920 \pm 100$ years B.P. to $3,885 \pm 125$ years B.P. by radiocarbon dating. Several coral species are illustrated, including a possible new species of *Dendrophyllia*.

- M
8-04139
- von Stosch, H. A.** (1962)
Naturwissenschaften, 49 : 42-3
(I requirements of marine algae). *De*

IABS 26 (3) 6580. I, arsenite and cobalamin requirements of *Asparagopsis armata* studied using a Schreiber solution for culture. Effects of I, arsenite and cobalamin deficiency and replacement are reported.

- M
8-04140
- Blinks, L. R. & C. V. Givan** (1961)
Biol. Bull., Woods Hole, 121 : 230-3

The absence of daily photosynthetic rhythm in some littoral marine algae

IABS 26 (3) 6585.

- M
8-04141
- Bouck, G. B.** (1962)
J. cell Biol., 12 : 553-69

Chromatophore development, pits, and other fine structure in the red alga, *Lomentaria baileyana* (Harv.) Farlow

IABS 26 (3) 6614. Ci 62-01904.

- M
8-04142
- Zonana, H. V.** (1961)
Johns Hopk. Hosp. Bull., (109) : 185-205
Fine structure of squid retina

IABS 26 (3) 6625.

- M
8-04143
- Braverman, M. H.** (1962)
Science, 135 : 310-1

Podocoryne carnea, a reliable differentiating system

IABS 26 (3) 6634. Marine hydroid can be easily grown on microscope slides in culture and provides a simple model for the study of differentiating systems. Number of nutritive hydranths in a colony increases exponentially until sexual forms appear.

- Lallier, R.** (1962) M
8-04144
Experientia, 18 : 141-2
 (Vegetalisation of the larva of the sea urchin *Paracentrotus lividus* by chloramphenicol). *Fr*

IABS 26 (3) 6635.

- Matthews, J. P.** (1962) M
8-04145
Invest. Rep. S.W. Afr. Mar. Res. Lab., (7) : 61 p.
 The rock lobster of south west Africa (*Jasus lalandii*) (Milne Edwards): size frequency, reproduction, distribution and availability

- Gorodilov, Yu. N.** (1961) M
8-04146
Tsitologiya, 3 : 469-70
 (The thermostability of the cells of *Arenicola marina* in relation to the temperature of the habitat). *Ru*

IABS 26 (3) 6701.

- Samosudova, N. V. & M. E. Slasvskaya** (1961) M
8-04147
Tsitologiya, 3 : 196-7
 (Ultrastructural peculiarities of adductor muscle in scallop). *Ru*

IABS 26 (1) 2247.

- Gonor, J. J.** (1961) M
8-04148
Vie et Milieu, 12 (3) : 381-403
 Observations on the biology of *Lobiger serradifalci*, a shelled sacoglossan opisthobranch from the Mediterranean. *Fr*

Feeding, reproduction, description of the living animal.

- Reyss, D.** (1961) M
8-04149
Vie et Milieu, 12 (3) : 473-81
Lagisca drachi, n. sp., polychète Aphroditidea récoltée dans le rech Lacaze-Duthiers (*Lagisca drachi*, n. sp., Polychaeta Aphroditidae, collected in the Lacaze-Duthiers canyon)

Taxonomic description and systematic position. Key to the world spp. of the genus.

- Davant, P. & B. Salvat** (1961) M
8-04150
Vie et Milieu, 12 (3) : 405-71
 Recherches écologiques sur la macrofaune intercotidale du bassin d'Arcachon. 1. Le milieu physique (Ecological research on the intercotidal macrofauna of the Arcachon basin. 1. The physical environment)

M

8-04151

Haefelfinger, H.-R. (1962)*Vie et Milieu*, 13 (1) : 161-5*Crimora papillata* Alder 1862, opisthobranch nouveau pour la Méditerranée (*Crimora papillata* Alder 1862, new opisthobranch for the Mediterranean)

Description of species.

M

8-04152

Burgi, A. & C. Devos (1962)*Vie et Milieu*, 13 (2) : 391-2Accumulation exceptionnelle de *Creseis acicula*, au long des côtes, dans la région de Banyuls-sur-Mer (Exceptional accumulation of *Creseis acicula*, along the coast of the Banyuls-sur-Mer region)

M

8-04153

Laubier, L. (1962)*Vie et Milieu*, 13 (2) : 388-90*Mystides* (*Pseudomystides*) *limbata* Saint-Joseph, Phyllocididae nouveau pour la Méditerranée (*Mystides* (*Pseudomystides*) *limbata* Saint-Joseph, new Phyllocididae for the Mediterranean)

Record of occurrence.

M

8-04154

Monniot, F. (1962)*Vie et Milieu*, 13 (2) : 231-322Recherches sur les graviers à *Amphioxus* de la région de Banyuls-sur-Mer (Research on the *Amphioxus* sand of the Banyuls-sur-Mer region)

Definition of geographic area, study of sediments and fauna, comparison of the Banyuls ground with that of other areas.

M

8-04155

Belloc, G. (1960)*Bull. Inst. océanogr. Monaco*, (1188) : 7 p.

Catalogue des types d'isopodes du Musée océanographique de Monaco (Catalogue of types of isopods of the Oceanographic Museum of Monaco)

M

8-04156

Vernet-Cornubert, G. (1960)*Bull. Inst. océanogr. Monaco*, (1186) : 24 p.Influence de l'ablation des pédoncules oculaires sur la mue, la ponte et les caractères sexuels externes de *Pisa tetradon* Pennant (Influence of oblation of the ocular peduncles on the moulting, spawning and external sexual characters of *Pisa tetradon* Pennant)

M

8-04157

Deschamps, P. (1960)*Trav. Cent. Rech. Étud. océanogr.*, 3 (3) : 41-51

Note sur l'attaque des bois immergés en milieu marin (Note on the attack to immersed wood in the marine environment)

Notes on marine borers and environment and their effect on immersed wood.

- Caso, M. E.** (1961) M
8-04158
An. Inst. Biol. Univ. Méx., 32 (1-2) : 313-31

Estudios sobre asteridos de Mexico. Observaciones sobre especies pacificas del genero *Acanthaster* y descripción de una subespecie nueva, *Acanthaster ellisii pseudoplanci* (Studies of asterids of Mexico. Observations on Pacific species of the genus *Acanthaster* and description of a new subspecies *Acanthaster ellisii pseudoplanci*)

- Rioja, E.** (1961) M
8-04159
An. Inst. Biol. Univ. Méx., 32 (1-2) : 235-49

Estudios anelidológicos 25. Un nuevo genero de la familia Pareulepidae, del Golfo de México (Annelidologic studies 25. A new genus of the family Pareulipidae, of the Gulf of Mexico)

Description of *MEXIEULEPIS* n.g. and *Mexieulepis elongatus* n. sp.

- Tar'ib, I.** (1959) M
8-04160
Berita Perik., 11 (4-5-6) : 108-10

Soekolilo dengan hasil terungnja (Sea-cucumber fishing in Soekolilo, near Surabaya). *Bah Ind*

Illustrated description of local minor industry.

- Bargoni, N. & A. Sisini** (1962) M
8-04161
Boll. Soc. ital. Biol. sper., 37 (24 bis) : 1815-8

Su di una L-serinadeidrasi dell'epatopancreas di *Carcinus moenas* L. (On a L-serinadehydrasis of the hepatopancreas of the crab *Carcinus moenas* L.). *It*

- Genovese, S.** (1962) M
8-04162
Atti Soc. pelor., 7 (3/4) : 285-97

Analisi biometrica di una popolazione di *Mytilus galloprovincialis* Lamrk. (Moll. Lam.) vivente nella laguna veneta (Biometrical analysis of a population of *Mytilus galloprovincialis* Lamrk. (Moll. Lam.) living in the Venetian lagoon). *It En*

The population examined reaches a greater development than the one previously studied in the brackish lake of Ganzirri (Messina) but the morphological identity between the two populations appears equally evident.

- Genovese, S.** (1962) M
8-04163
Atti Soc. pelor., 7 (3/4) : 335-53

Analisi biometrica di una popolazione di *Mytilus edulis* L. provenienti dal Mare del Nord (Norddeich/Ostfriesland) (Biometrical analysis of a population of *Mytilus edulis* L. from the North Sea (Norddeich/Ostfriesland). *It En*

The results were also compared with those obtained from two populations of mussels respectively from the brackish lake of Ganzirri (Messina) and from the lagoon of Venice.

M

Albanese, M. P., F. Cannata & G. Costanzo (1962)

8-04164

Atti Soc. pelor., 7 (3/4) : 209-15

Esame citometrico degli oociti in accrescimento degli Echinodermi. Nota 4. Confronto tra le diverse specie (Cytometric study of the growing oocytes of the Echinodermata. 4. Comparison between the species). *It En*

Ci 62-01926. *Arbacia lixula*, *Sphaerechinus granularis*, *Paracentrotus lividus* differ, relatively to the nuclear values, from *Antedon rosacea* and, relatively to nucleolar ones, agree with the same sp., differing on the contrary from any previously studied sp.

M

Albanese, M. P. (1962)

8-04165

Atti Soc. pelor., 7 (3/4) : 201-8

Manifestazioni nel nucleolo degli ovociti in accrescimento di *Sphaerechinus granularis* Lamk. (Chief aspects of the nucleolus of the growing oocytes of *Sphaerechinus granularis* Lamk.). *It En*

Two chief aspects were found: one relative to the ribonucleoproteins and a following one in the vitellogenetic period relative to the presence of the nucleolonemal granules.

M

Crisafi, P. (1962)

8-04166

Atti Soc. pelor., 7 (3/4) : 263-7

Nuove osservazioni sulla femmina di *Phyllopodopsyllus pauli* (Copepoda, Harpacticoida) e descrizione del maschio (New observations on the female of *Phyllopodopsyllus pauli*, Copepoda, Harpacticoida, and description of the male). *It En*

To this sp. belong shorter females with contracted fourth foot and longer ones with distended fourth foot. The male is considered as intermediate between the two related genera *Phyllopodopsyllus* and *Paraphyllopodopsyllus*.

M

Antonini, E., A. Rossi-Fanelli & A. Caputo (1962)

8-04167

Boll. Soc. ital. Biol. sper., 37 (24 bis) : 1530

Peso molecolare della cluorocruorina di *Spirographis spallanzani* (Molecular weight of the chlorocruorine of *Spirographis spallanzani*). *It*

M

Farina, B. (1962)

8-04168

Boll. Soc. ital. Biol. sper., 37 (24 bis) : 1703-5

Pirimidine nei corpi bianchi di *Octopus vulgaris* (Pyrimidine in the *corpora lutea* of *Octopus vulgaris*). *It*

M

Leloup, E. (1960)

8-04169

Bull. Inst. océanogr. Monaco, (1185) : 19 p.

Larves de cérianthaires de Monaco et de Villefranche-sur-Mer (Larvae of Ceriantheae from Monaco and Villefranche-sur-Mer)

M

Carpine, C. (1960)

8-04170

Bull. Inst. océanogr. Monaco, (1187) : 50 p.

Révision des connaissances sur la biologie et la prévention des xylophages marins (Revision of the knowledge on the biology and prevention of marine xylophages)

M

Brinckmann, A. (1962)

8-04171

Pubbl. Sta. zool. Napoli, 33 (1) : 1-9

The life cycle of *Merga gallieri* sp. n. (Anthomedusae, Pandeidae). En De

Several colonies of a *Perigonimus*-like polyp have been found and the medusa has been reared. Both medusa and polyp proved to be a new sp. of the genus *Merga* Hartlaub 1913—Description.

M

Ryland, J. S. (1962)

8-04172

Pubbl. Sta. zool. Napoli, 33 (1) : 20-31

Some species of *Bugula* (Polyzoa) from the bay of Naples. En Fr

Five spp. of *Bugula* (*gautieri*, *aperta*, *turbinata*, *spicata*, *calathus minor* and *fulva*) from the bay of Naples are described and a key is provided to facilitate identification.

M

Grein, A. & C. Spalla (1962)

8-04173

Pubbl. Sta. zool. Napoli, 33 (1) : 32-49

Ecologia ed esigenze nutritive della flora microbica del golfo di Napoli (Ecology and nutritional requirements of the microbe flora from the bay of Naples). It En

Technical methods employed are exposed, and the results of the observations of the microorganisms in bottom and water samples are given.

M

Tardent, P. (1962)

8-04174

Pubbl. Sta. zool. Napoli, 33 (1) : 50-63

Morphogenetic phenomena in the hydrocaulus of *Tubularia*. It En

Description of the regeneration process.

M

Tortonese, E. (1959)

8-04175

Natura, Milano, 50 (1) : 18-26

Osservazioni sul bentos del mar di Marmara (Observations on the benthos of sea of Marmara). It

List of invertebrates collected.

Bolognari, A. (1959)M
8-04176*Boll. Zool.*, 26 : 21-8

Osservazioni al microscopio elettronico sul condrioma e sulle granulazioni acidofile e basofile delle cellule del corpo bianco dei molluschi cefalopodi (Electron microscopic observations on the condrioma and on the acidophil and basophil granulations of the cells in the white body of cephalopod molluses). *It Fr*

Difference between *Sepia officinalis* and *Octopus vulgaris*.

Minganti, A. (1959)M
8-04177*Boll. Zool.*, 26 : 29-34

Studio citologico di andromerogoni ibridi *Ascidia malaca* ♀ × *Phallusia mamillata* ♂ (Ascidie) (Cytological investigation of androgenetic hybrids, *Ascidia malaca* ♀ × *Phallusia mamillata* ♂ (Ascidacea). *It En*

All of them contain only chromosomes of *Phallusia* in the haploid number
Development of the embryos.

Thomas, L. B. (1962)M
8-04178*Sea Frontiers*, 8 (2) : 103-8

Ugly duckling of the sea

Article on biology of holothurians, with reference to parasitization by *Carapus*; use for food, extracts as fish poison, shark repellent and inhibitor of tumor growth.

G.L.V. (1962)M
8-04179*Sea Frontiers*, 8 (2) : 125

Panamic-Pacific Pelecypoda

Re 62-00169.

Filho, H. M. & M. B. Kutner (1962)M
8-04180*Bol. Univ. Paraná (Bot.)*, (4) : 24 p.

Contribuição para o conhecimento das diatomáceas do manguesal do Alexandra (Contribution to the knowledge of the diatoms of the mangrove of Alexandra). *Pr En De*

Sixty-six species of diatoms were determined. Many species that occur in marine sediments and mangroves of some regions of the Atlantic coast of Africa were also observed, thus showing a possibility of hydrobiologic correlation.

Boilly, B. (1962)M
8-04181*C.R. Acad. Sci., Paris*, 255 (17) : 2198-200

Origine des cellules dans la régénération postérieure de *Syllis amica* Quatrefages (Annélide Polychète) (The origin of cells during the posterior regeneration in *Syllis amica* Quatrefages (Annelida Polychaeta))

Preliminary notes on histological studies verified by experimental results.

M

8-04182

Crisafi, P. (1959)
Boll. Zool., 26 : 59-68

Sulla *Oithona setigera* (Copepoda, Cyclopoida) dello stretto di Messina
 (On *Oithona setigera* (Copepoda, Cyclopoida) from the strait of Messina).
It En

Concludes that *Oithona setigera* represents the type, whereas *O. challengerii*,
O. tropica and *O. pelagica* must be considered as synonyms. *O. linearis*
 is a simple variety. The male hitherto described by Rosendorn belongs to
 another sp.

M

8-04183

Sarà, M. (1959)
Boll. Zool., 26 : 89-96

Sulla coesistenza di specie strettamente affini di Poriferi in biotopi litorali
 (On the coexistence of strictly related spp. of Porifera in littoral biotopes).
It En

Nine spp. of clionids from Rovigno show a vertical and substrate-differentia-
 tion with eurytopic and stenotopic forms. Three spp. of *Clathrina* of the bay
 of Naples are distributed differently in relation to light and exposition.

M

8-04184

Stefani, R. (1959)
Boll. Zool., 26 : 115-20

Sulla variabilità ecologica di un idrozoo (*Campanaria caliculata* Hincks)
 (Ecological variability of the hydroid *Campanaria caliculata* Hincks). *It En*

Demonstrates the existence in the gulf of Cagliari of two different forms,
 living in different ecological niches.

M

8-04185

Graziadei, P. (1959)
Boll. Zool., 26 : 159-71

Ricerche sul sistema nervoso di molluschi cefalopodi (Researches on the
 nervous system in cephalopods). *It Fr*

Anatomical study.

M

8-04186

Bolognari, A. (1959)
Boll. Zool., 26 : 173-80

Struttura ed ultrastruttura del nucleolo degli oviciti del riccio di mare
 (*Paracentrotus lividus*) (Structure and ultrastructure of the nucleolus in
 oocytes of the sea urchin, *Paracentrotus lividus*). *It Fr*

Electron microscope observations.

Sabbadin, A. (1959)M
8-04187*Boll. Zool.*, 26 : 221-43

Analisi genetica del policromatismo di *Botryllus schlosseri* (Pallas) Savigny (Ascidacea) (Genetic analysis of the polychromatism of *Botryllus schlosseri* (Pallas) Savigny—Ascidacea). *It En*

Description of the main colour markings and of their behaviour during the life of the colonies. The colour patterns, for which a genetic determination has been here demonstrated, are not specific characters but seem to represent a valuable tool of genetic analysis of the natural population of the sp.

Leone, V. (1959)M
8-04188*Boll. Zool.*, 26 : 297-8

Sull'azione della ribonucleasi sullo sviluppo del riccio di mare (On the action of ribonucleasis on the development of the sea urchin). *It*

Disturbs the embryonal development and mainly the entoderm formation, without inducing animalization.

Mancuso, V. (1959)M
8-04189*Boll. Zool.*, 26 : 329-39

Prime ricerche sulla ultrastruttura dell'uovo nelle ascidie (First researches on the ultrastructure of the eggs in ascidians). *It En*

Electron microscope observations of the cytoplasmic constituents of the unfertilized eggs of *Ciona intestinalis*.

Ortolani, G. (1959)M
8-04190*Boll. Zool.*, 26 : 341-8

Ricerche sulla induzione del sistema nervoso nelle larve delle ascidie (Researches on the induction of the nervous system in the larval stages of ascidians). *It En*

Shows that in *Phallusia mamillata* the nervous system is not determined at the 64-cell stage. A few blastomeres may exert a neural induction, and such blastomeres are those which give rise to the archenteron roof of the gastrula.

Minganti, A. (1959)M
8-04191*Boll. Zool.*, 26 : 349-55

Trapianto di blastomeri di ibridi letali di ascidie su embrioni normali (Transplantation of blastomeres from lethal hybrids of ascidians to normal embryos). *It En*

No evidence of revitalization has been shown by the transplanted blastomeres, which seemed unable to carry out the morphogenetic movements and to differentiate.

- Fanriella Ferruzza, N.** (1959) M
8-04192
Boll. Zool., 26 : 357-63
 Fenomeni di induzione nelle ascidie (Induction of spinal chord in ascidians). *It En*

The spinal chord is induced by a simple cell of the 64-cell stage. The induction can be produced either by chordal or by eutodermal cells.

- Stagni, A.** (1959) M
8-04193
Boll. Zool., 26 : 397-403
 Fenomeni rigenerativi e origine degli elementi germinali in *Spirorbis pagenstecheri* (Regeneration and germinal elements in *Spirorbis pagenstecheri*)

Posterior regeneration in this polychaete is easily and quickly obtained. The regenerated somites rise from vessel neoblasts.

- Sarà, M.** (1960) M
8-04194
Boll. Zool., 27 : 51-65
 Aspetti e problemi di una ricerca sinecologica sui Poriferi del golfo di Napoli (Problems about a synecological study on Porifera of the gulf of Naples). *It Fr*

Importance of a comparative synecological research in the various biotopes of the gulf.

- Hasegawa, Y.** (1962) M
8-04195
Bull. Hokkaido reg. Fish. Res. Lab., (24) : 116-38
 An ecological study of *Laminaria angustata* Kjellman on the coast of Hidaka prov., Hokkaido

- Voss, G. L. & C. Phillips** (n.d.) M
8-04196
Contr. Mar. Lab. Univ. Miami, (203) : 223-32
 A first record of *Octopus macropus* Risso from the United States with notes on its behavior, color, feeding and gonads

- L'Hardy, J.-P. & C. Quiévreux** (1962) M
8-04197
C.R. Acad. Sci., Paris, 255 (17) : 2173-5
 Remarques sur le "polymorphisme" de *Spirorbis borealis* Daudin (Remarks on the "polymorphism" of *Spirorbis borealis* Daudin)

Preliminary note based on observations of natural populations of Rosecoff (Finistère); identifies and briefly describes five forms.

- Serenkov, G. P. & M. V. Pakhomova** (1960) MF
8-04198
Vestn. mosk. Univ., (IV), 15 (6) : 15-25
 Nitrogen compounds of algae

WFA 13 (3) : 45. Seaweeds—chemical composition.

- Wilson, I. M.** (1962)
Trans. Brit. mycol. Soc., 45 (2) : 286-7
 Fungi in oceans and estuaries
 Re 62-04781.

MF
 8-04199

- Wootton, J. A. & MacMullen** (1962)
 Thesis, Cornell Univ., 156 p.
 The utilization of melavonic acid by species of invertebrate animals

MF
 8-04200

DA 23 (2) : 423. Species from eight phyla and two chordate groups were treated with 2-C¹⁴ melavonic acid to determine whether or not the sterol nucleus can be biosynthesized by these animals: *Euglena gracilis*, *Cliona celata* and *Sycon coronatum*, *Nereis diversicolor*, *Buccinum undatum*, *Venerupis rhomboïdes*, *Carcinus maenas* and *Leander serratus*, *Asterias rubens*.

- Grassé, P.-P.** (Ed.) (1961)*
 Paris, Masson & Cie, 944 p.

MF
 8-04201

Traité de zoologie. Anatomie, Systématique, Biologie. Tome 4. 1er fascicule: Plathelminthes, Mésozoaires, Acanthocéphales, Némertiens (Treatise on Zoology. Anatomy, Systematics, Biology. Vol. 4. First fascicule: Plathelminths, mesozoans, acanthocephalans, nemerteans)

- Graham, A.** (1962)
Nature, Lond., 195 (4848) : 1239
 Treatise on zoology

MF
 8-04202

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 CR 61-00421.

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8-04394
Proc. gen. Fish. Coun. Medit., 6 : 137-43
 Influence des facteurs physiques sur les déplacements des poissons
 (Influence of physical factors on the movements of fishes). En

CR 61-00420.

- Morović, D.** (1961) M
8-04395
Proc. gen. Fish. Coun. Medit., 6 : 155-7
 Contribution à la connaissance de la nutrition du thon rouge (*Thunnus thynnus* L.) dans l'Adriatique, d'après les prises faites à la senne tournante
 (Contribution to the knowledge of the nutrition of blue-fin tuna, *Thunnus thynnus* L., in the Adriatic from fishes caught with ring nets). En

CR 61-00423.

- Matta, F.** (1961) M
8-04396
Proc. gen. Fish. Coun. Medit., 6 : 159-62
 Preliminary note on the catching of soles by the "rapido" trawl net.
 Fr

CR 61-00424.

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8-04397
Proc. gen. Fish. Coun. Medit., 6 : 175-82
 Variations saisonnières dans la composition de la sardine méditerranéenne
 et atlantique (Seasonal variations in the chemical composition of the Mediter-
 ranean and Atlantic sardine). En

CR 61-00427.

- Mozzi, C. & A. Duo** (1961) M
8-04398
Proc. gen. Fish. Coun. Medit., 6 : 189-96
 Observations sur les sardines (*Sardina pilchardus* Walb.) de la haute
 Adriatique débarquées à Chioggia en 1958 (Observations on the sardines,
Sardina pilchardus Walb., from the upper Adriatic, landed at Chioggia in
 1958). En

CR 61-00429.

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8-04399
Proc. gen. Fish. Coun. Medit., 6 : 213-8
 Contribution to the knowledge of the eggs of the common bonito (*Sarda sarda* Bloch). Fr

CR 61-00433.

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8-04400
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 CR 61-00434.
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Proc. gen. Fish. Coun. Medit., 6 : 221-3
 Note on the sardine (*Clupea pilchardus* Walb.) and its reproduction in the Sea of Marmara. Fr
 CR 61-00435.
- Grubisić, F.** (1961) M
8-04402
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 Length of purse-seine and size of sardine schools. En
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- Demirhindi, U.** (1961) M
8-04403
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 CR 61-00442.
- Ben Tuvia, A.** (1961) M
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- Scaccini, A.** (1961) M
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 CR 61-00450. Abstract only.
- Scaccini, A.** (1961) M
8-04406
Proc. gen. Fish. Coun. Medit., 6 : 293-4
 Considérations sur les déplacements et la distribution des jeunes thons en Adriatique (Remarks on the déplacements and distribution of young tunas in the Adriatic Sea). En
 CR 61-00451.

Atli, M. & F. Erman (1961) M
8-04407
Proc. gen. Fish. Coun. Medit., 6 : 303-22
 On the biology of sardine (*Sardina pilchardus* Walb.). Fr
 CR 61-00453.

Belloc G. (1961) M
8-04408
Proc. gen. Fish. Coun. Medit., 6 : 345-71
 Inventaire des madragues méditerranéennes (Inventory of the Mediter-
 ranean tuna traps)

Essapian, F. S. (1962) M
8-04409
Norsk Hvalfangst-tid., 51 (9) : 341-4
 An albino bottle-nosed dolphin, *Tursiops truncatus*, captured in the United
 States

Describes the operation of capture, the animal and its normal colored
 calf now kept at the marine aquarium of Miami.

Fiennes, R. N. T.-W. (1962) M
8-04410
New Scient., 16 (309) : 148-9
 A penguin health problem

General review on a disease of penguins in zoos: *Aspergillus fumigatus*, or
 the related *A. flavus* or *A. nidulans*.

Moisey, P. A. (Israel Program for Scientific Translations, M
8-04411
 Jerusalem, Transl.) (1962)
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 Factors of population dynamics of the commercial fauna in the northwest
 Pacific Ocean

En 59-2873UL. Review of biogeography and ecology of the area, with
 appraisal of potential for fishery expansion. Available from the Office of
 Technical Services, U.S. Department of Commerce, Washington, D.C.

Trewavas, E. (1962) M
8-04412
Ann. Mag. nat. Hist. (13), 5 (51) : 167-76
 A basis for classifying the sciaenid fishes of tropical West Africa

Ci 60-3423. West African spp. compared with members of family from
 other parts of world, and concluded that sciaenid spp. can be grouped into
 genera or tribes on basis of structure of air-bladder where this is complex.
 Purpose of this note is to give brief justification for generic groupings and
 nomenclature which result from the application of this principle to the 9 spp.
 confined to tropical West African waters. This nomenclature has been
 accepted in principle by Longhurst—1957, 1959—but Collignon—1959, 1960
 —has published a classification which differs very little from older ones and
 ignores air-bladder.

- M
8-04413
- Hoffmeister, H. et al.** (1961)
Z. Zellforsch., 55 : 810-7
 (Secretory granules in branchial heart of *Myxine glutinosa*). Fr
 IABS 26 (2) 4282.
- M
8-04414
- Film** (1960)
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 The king crab story
 16 mm, colour, sound, 30 min. Shows the importance of the king crab industry in Kodiak Island's economy.
- M
8-04415
- Bargmann, W. & A. Knoop** (1961)
Z. Zellforsch., 55 : 577-96
 (Saccus vasculosus of fish: further studies). De
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8-04416
- Mellinger, J.** (1962)
C.R. Acad. Sci., Paris, 255 (15) : 1789-91
 Existence de plusieurs systèmes neurosécrétoires hypothalamo-hypophysaires chez les poissons elasmobranches *Scyliorhinus caniculus* et *Sc. stellaris*. Microscopie ordinaire et microscopie électronique (On the existence of various hypothalamus-hypophysis systems in Elasmobranchii *Scyliorhinus caniculus* and *Sc. stellaris*. Ordinary microscopy and electronic microscopy)
 Preliminary note based on material collected at Wimereux, France.
- M
8-04417
- Clarke, R.** (1963)
FAO Fish. Biol. tech. Pap., (32) : 26 p.
 Observación y marcación de ballenas frente a la costa de Chile en 1958 y desde Ecuador hacia las Islas Galápagos y más allá en 1959 (Whale observation and whale marking off the coast of Chile in 1958 and from Ecuador towards and beyond the Galápagos Islands in 1959)
 Es 8-02358.
- M
8-04418
- Schöne, H.** (1961)
Biol. Bull., Woods Hole, 121 : 354-65
 Learning in the spiny lobster *Panulirus argus*
 IABS 26 (3) 6450.
- M
8-04419
- Protasov, V. R. & M. I. Aronov** (1960)
Biofizika (En Transl.), 5 : 851-3
 Biological significance of sounds of certain Black Sea fish
 IABS 26 (1) 2093. En 61-10925.

- Laurie, J. S.** (1961) M
8-04420
Comp. Biochem. Physiol., 4 : 63-71
 Carbohydrate absorption in cestodes from elasmobranch fishes

IABS 26 (1) 2248. Eight spp. from *Lacistorhynchus*, *Calliobothrium*, *Onchobothrium*, *Phyllobothrium*, *Anthobothrium*, *Inermiphylloidium*, *Orygmato-*
bothrium, *Disculiceps*, absorbed glucose and galactose.

- Kisaburo Taguchi** (1961) M
8-04421
Bull Jap. Soc. sci. Fish., 27 : 637-40
 (On the growth of catchable salmon in offshore waters). Ni En

IABS 26 (1) 2292.

- Nouvel, H.** (1961) M
8-04422
Vie et Milieu, 12 (3) : 565-74

Un dicyémide nouveau, *PLEODICYEMA delamarei* n.g., n.sp., parasite du céphalopode *Bathypolypus sponsalis*. Remarques sur la validité des genres *Dicyemodoca* Wheeler, *Pseudicyema* Nouvel, et *Microcyema* v. Beneden (A new dicyemid, *PLEODICYEMA delamarei* n.g., n.sp., parasite of the cephalopod *Bathypolypus sponsalis*. Remarks on the validity of the genera *Dicyemodoca* Wheeler, *Pseudicyema* Nouvel and *Microcyema* v. Beneden)

Contains description of the species.

- Théodorides, J.** (1962) M
8-04423
Vie et Milieu, 13 (1) : 95-122

Grégarines d'invertébrés marins de la région de Banyuls. 1. Eugrégarines parasites de crustacés décapodes (Gregarines from marine invertebrates from the Banyuls region. 1. Eugregarines parasites of decapod crustaceans)

Lists the spp. of parasites and their hosts.

- Knoepfler, L.-P.** (1962) M
8-04424
Vie et Milieu, 13 (2) : 327-31

Une curieuse anomalie de la carapace chez *Caretta caretta caretta* (Linnaeus 1758) (A curious anomaly of the carapace in *Caretta caretta caretta* (Linnaeus 1758))

Anomaly caused by changes in the anatomy.

- Schaefer, M. B.** (1962) M
8-04425
Pesca, Lima (Yearb.), 1961-1962 : 119-21
 La pesca del atún tropical (The tropical tuna fishery)

Discusses the basis of the proposed recommendations for regulation of yellowfin tuna.

- M
8-04426
- Saetersdal, G.** (n.d. 1962)
Pesca, Lima (Yearb.), 1961-1962 : 91-5
 El futuro de la anchoveta (The future of anchovy)

Brief account of Japanese and Californian sardine and Norwegian herring fisheries and their fluctuations, and discussion of fluctuations and overfishing of the Peruvian anchovies.

- M
8-04427
- King, J. E.** (1962)
Norsk Hvalfangst-tid., 51 (3) : 10420
 Some of the aquatic modifications of seals. No

Otariid and phocid shape and swimming, temperature regulation, senses, respiratory system, kidneys, vascular system and diving.

- M
8-04428
- Brown, S. G.** (1962)
Norsk Hvalfangst-tid., 51 (3) : 93-103

International co-operation in Antarctic whale marking 1957 to 1960, and a review of the distribution of marked whales in Antarctica. No

- M
8-04429
- Schevill, W. E.** (1962)
Norsk Hvalfangst-tid., 51 (4) : 141-50
 Cetacea (the whales). No

General article covering living Cetacea, reproduction, swimming and diving, food and feeding, senses, respiration and voice.

- M
8-04430
- Smith, J. L. B.** (1962)
Ichthyol. Bull., (25) : 469-502

Fishes of the family Gaterinidae of the western Indian Ocean and the Red Sea with a resumé of all known Indo-Pacific species

Description of genera and species and keys to identification.

- M
8-04431
- de la Fouchardière, G.** (1961)
Bull. franç. Piscic., 33 (201) : 137-43

Effets physiologiques des explosions sur les animaux aquatiques (Physiological effects of explosions on aquatic animals)

Effects on fishes, molluscs, crustaceans and various other invertebrates.

- M
8-04432
- Smith, J. L. B.** (1961)
Ichthyol. Bull., (22) : 373-418

Fishes of the family Apogonidae of the western Indian Ocean and the Red Sea

Keys to identification of subfamilies, genera and species and description of the same.

- Brunel, P.** (1961) M
8-04433
Cah. Inform. Sta. Biol. mar. Grande-Rivière, (7) : 9 p.
 Liste taxonomique des invertébrés marins des parages de la Gaspésie
 identifiés au 3 août 1959 (Taxonomic list of marine invertebrates of the
 Gaspé region identified on 3 August 1959)

- Barahona, V. A.** (1959) M
8-04434
An. Univ. Valparaíso, (6) : 176 p.
 El género *Sardinops* en el litoral norte de Chile (The genus *Sardinops*
 on the northern coast of Chile)

Taxonomy, distribution, statistics, fishing grounds and methods.

- F. de T.** (1962) M
8-04435
Puntal, 9 (95) : 12-3
 La pesca industrial de la langosta en Cuba (Industrial fishing of spiny
 lobster in Cuba)

Distribution, habitat, commercial value.

- Holthuis, L. B. & F. A. Villalobos** (1961) M
8-04436
An. Inst. Biol. Univ. Méx., 32 (1-2) : 251-76
Panulirus gracilis Streets y *Panulirus inflatus* (Bouvier), dos especies de
 langosta (Crustacea, Decapoda) de la costa del Pacifico de America (*Panulirus*
gracilis Streets and *Panulirus inflatus* (Bouvier), two species of spiny lobster
 (Crustacea, Decapoda) of the Pacific coast of America)

Enumerates the characteristics of the species, discusses their nomenclature,
 synonymy, distribution and economic importance.

- Caballero y C., E. & M. B. Hollis** (1961) M
8-04437
An. Inst. Biol. Univ. Méx., 32 (1-2) : 201-17
 Trematodos de peces de aguas mexicanas del Pacifico. 20. Tres especies
 de Monogenoidea Bychowsky, 1937 (Trematodes of fishes of Mexican
 Pacific waters. 20. Three species of Monogenoidea Bychowsky, 1937)

Ci 62-01516, Ci 61-05988. Taxonomic descriptions of *Diplectanum ameri-*
canum, *Loimos winteri* n. sp. and *Mexicana littoralis* n. sp.

- Lamothe, R. A.** (1961) M
8-04438
An. Inst. Biol. Univ. Méx., 32 (1-2) : 219-33
 Estudio de dos trematodos digeneos de peces del Golfo de California,
 Mexico (Study of two digenous trematodes of fishes of the Gulf of California,
 Mexico)

Genolinea laticauda and *Pseudolepidapedon sinaloense* are redescribed from
 the hosts *Kyphosus elegans* and *Verrunculus polylepis*.

M

Nikolov, D. Khr. (1960)

8-04439

Trud. nauch.-izsled. Inst. Rib. Prom. Varna, 3 : 91-115Biologiya na palamida (*Sarda sarda* (Bloch)) v Chernomore (Biology of the bonito *Sarda sarda* (Bloch) from the Black Sea). Bu Ru De

M

Georgiev, Zh. M. (1960)

8-04440

Trud. nauch.-izsled. Inst. Rib. Prom. Varna,Nov vid za bulgarskata ikhtiofauna—*Euthynnus alletteratus* (Raf.)—maluk tunets (New species for the Bulgarian ichthyofauna—*Euthynnus alletteratus*—little tunny). Bu Ru Fr

M

Epshtein, V. N. (1962)

8-04441

Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1121-4

A review of the fish leeches Hirudinea, Piscicolidae, from the northern seas of SSSR

En 62-04750. Based on examination of extensive material in Zoological Institute, USSR Academy of Science from collections by polar expeditions 1898-1948, and 1960. Gives spp. lists and distribution notes.

MF

Chagas, C. & A. Paes de Carvalho (1961)

8-04442

New York, Elsevier Publ. Co., 414 p

Bioelectrogenesis

Contents: 1. Morphological data on electric organs (4 papers). 2. Physiology of electric organs (6 papers). 3. The nervous control of the discharge (3 papers). 4. Ecology of electric fishes (1 paper). 5. Basic mechanisms of production of discharge (12 papers). List of contributors. Subject index. Contains 816 literature references.

M

Unar, M. (1959)

8-04443

Berita Perik., 11 (4-5-6) : 88-90

Masalah perikanan karang (Nuro-ami fishing). Bah Ind

Description of industry in the bay of Djakarta. Principal species: *Caesio erythrogaster*, *C. diagramma* and *C. crysezonus*.

M

Bucci, E. & C. Fronticelli (1962)

8-04444

Boll. Soc. ital. Biol. sper., 37 (24 bis) : 1765-8

Caratteristiche spettrofotometriche dell'emoglobina e mioglobina di tonno (Spectrophotometrical characteristics of hemoglobin and myoglobin in tuna).

It

M

Fronticelli, C. & E. Bucci (1962)

8-04445

Boll. Soc. ital. Biol. sper., 37 (24 bis) : 1771-3

Denaturazione in ambiente alcalino dell'emoglobina e mioglobina di tonno (Denaturation of hemoglobin and myoglobin of tunas under special conditions).

It

- M
8-04446
- Castellani Pastoris, M.** (1962)
Parassitologia, 4 (1) : 59-67
 Elminti rinvenuti in *Box boops* dei mari italiani (Helminths found in *Box boops* from Italian seas). *It*

List of parasites found. Among them trematodes of the genus *Axine* and *Monorcheides* not yet observed in that fish, and some cestode larvae.

- M
8-04447
- Genovese, S. & V. Alonzo** (1962)
Atti Soc. pelor., 7 (3/4) : 299-304

Sul contenuto stomacale di tonni (*Thunnus thynnus* L.) catturati nello stretto di Messina ed in alcune tonnare della Sicilia e della Calabria (On the stomach contents of tuna (*Thunnus thynnus* L.) caught in the strait of Messina and in some madragues of Sicily and Calabria). *It En*

pH measurements taken on the stomach contents of some of the tunas examined.

- M
8-04448
- Chieffi, G., F. Della Corte & V. Botte** (1962)
Atti Soc. pelor., 7 (3/4) : 393-7

Ricerca istochimica dell'attività della steroide 3β -olo deidrogenasi nel testicolo di *Torpedo marmorata* Risso e di *Scyliorhinus stellaris* (L.) (Histochemical research of the steroid 3β -olo-dehydrogenase activity in the testis of *Torpedo marmorata* Risso and *Scyliorhinus stellaris* (L.)). *It En*

The findings further confirm the homology of the interstitial cells of the elasmobranch with Leydig's cells of the higher vertebrates.

- M
8-04449
- Schiff, H.** (1962)
Pubbl. Sta. zool. Napoli, 33 (1) : 10-9

Wirkung des Cephalotoxins und anderer Pharmaka auf die glatte Muskulatur von *Octopus vulgaris* L. und auf das Zentralnervensystem von *Squilla mantis* L. (Effect of cephalotoxin and other products on the muscles of *Octopus vulgaris* L. and on the central nervous system of *Squilla mantis* L.). *De En*

The paralysis of the crabs due to cephalotoxin could be explained by an abolition of coordination in the central nervous system, an increase of inhibitory impulses, and asphyxia caused by cephalotoxin or a blocking of the synapses.

- M
8-04450
- Cavaliere, A.** (1962)
Boll. Pesca Piscic. Idrobiol., 15 (2) : 171-6

Notizie su biologia e pesca di *Tetrapturus belone* Raf., cenni sull'adulto e descrizione di un suo rarissimo stadio giovanile (Contribution to the knowledge of the biology and catch of *Tetrapturus belone* Raf., morphometric data of a grown-up specimen and description of a very rare juvenile stage). *It Fr En*

Genovese, S. (1962)M
8-04451*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 177-89Sul regime alimentare di *Thunnus thynnus* (L.) (On the alimentary regimen of *Thunnus thynnus* (L.)). *It Fr En*

Tuna in the full sexual maturity refuse food, and progressively acquire their capacity of feeding in relation to the fractional delivery of their sexual products. The intergenetic tuna is an active plunderer and its nourishment is mainly formed by fishes.

Bini, G. (1962)M
8-04452*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 225-36Sull'identità della *Cerna chrysotaenia* Doderlein (On the identity of *Cerna chrysotaenia* Doderlein). *It Fr En*

Epinephelus chrysotaenia Doderlein in the opinion of the author is the adult form of *Epinephelus alexandrinus* Cuv. & Val.—the former therefore is not a valid sp.

Anon. (1962)M
8-04453*Sea Frontiers*, 8 (2) : 108

Now a sea-cow repellent!

Short note on use of synthetic scent of lion to repel Sirenacea damaging sugar cane crops in S. Africa.

Tinbergen, N. (1960)*M
8-04454

New York, Basic Books Inc., 255 p.

The herring gull's world

C.P.I. (1962)M
8-04455*Sea Frontiers*, 8 (2) : 124

The herring gull's world

Re 8-04454.

Chieffi, G. & L. Gualà (1959)M
8-04456*Boll. Zool.*, 26 : 121-8Origine preovulatoria dei corpi lutei in *Torpedo marmorata* (Preovulatory origin of the corpora lutea in *Torpedo marmorata*). *It En*

Histogenesis of the corpora lutea, suggests that the reproductive cycle may be controlled by the ovary through an endocrine mechanism.

Renzoni, A. (1959)M
8-04457*Boll. zool.*, 26 : 203-5

Fosfatasi alcalina nell'apparato gastrointestinale di *Scyliorhinus canicula* e *stellaris* (Presence of alkaline phosphatase in the alimentary tract of *Scyliorhinus canicula* and *stellaris*). It En

Concludes that the absorption of food takes place almost exclusively in the spiral valve.

Vasconcelos, M. S. & M. L. Paes da Franca (1962)M
8-04458

Contribuição para um melhor conhecimento do genero *Aulostomus* (Teleostei Aulostomoidei) (Contribution to the knowledge of the genus *Aulostomus* (Teleostei Aulostomoidei)). En

Taxonomic study of the genus based on a small sample from Cape Verde.

Shiino, S. M. (1959)*M
8-04459*Rep. Univ. Mie*, (2) : 3 (1) : 1-34

Revision der auf Goldmakrele, *Coryphaena hippurus* L., schmarotzenden Caligidenarten (Revision of the caligid species parasitizing on the dolphin *Coryphaena hippurus* L.)

Roux, Ch. (1961)*M
8-04460*Bull. Inst. Pêch. marit. Maroc*, (7) : 33-44

Résumé des connaissances actuelles sur *Katsuwonus pelamis* (Linné) (Summary of the actual knowledge of *Katsuwonus pelamis* (Linné))

Collignon, J. (1961)*M
8-04461*Bull. Inst. Pêch. marit. Maroc*, (7) : 55-

Thazard ou melva dans l'Atlantique Oriental (Thazard or frigate mackerel in the western Atlantic)

de Vildoso, A. Chirinos (1960)*M
8-04462*Pesca y Caza, Lima*, (10) : 111-4

Casos de hermafroditismo en el bonito *Sarda chilensis* (C. & V.) (Cases of hermaphroditism in the bonito *Sarda chilensis* (C. & V.))

Anon. (Israel Program for Scientific Translations, Jerusalem, Transl.) (1961)
155 p.M
8-04463

Herring; selected articles from Soviet periodicals

Available from the Office of Technical Services, U.S. Department of Commerce, Washington.

- Wilson, R. C. & T. S. Austin** (1959) M
8-04464
Pacif. Fisherm., 57 (1) : 29-31
 Tuna season in the Marquesas

Results of survey of abundance of tuna in the Marquesas group and Tuamotu archipelago.

- Lima, F. R. & J. P. Wise** (1962)* M
8-04465
Bol. Estuol. Pesca, Recife, 2 (10) : 12-7

Primeiro estado da abundancia e distribuição da albacora de laje e da albacora branca na região ocidental do oceano atlantico tropical (1957-1961) (A first examination of the abundance and distribution of yellowfin and albacore tuna in the western tropical Atlantic, 1957 to 1961). *Pr*

- Rosa, H., Jr.** (Ed.) (1963) M
8-04466
FAO Fish Rep., (6), vol. 3 : 977-1851

Proceedings of the world scientific meeting on the biology of tunas and related species, La Jolla, California, U.S.A., 2-14 July 1962

Pr 61-228me. Co 8-03362. Methodological and experience papers. Contains 8-04467 to 8-04523.

- Collette, B. B. & R. H. Gibbs, Jr.** (1963) M
8-04467
In 8-04466 : 977-8

A preliminary review of the fishes of the family Scombridae. *Fr Es*

Abstr. only. Text in 62-05722.

- Yabe, H., Y. Yabuta & S. Ueyanagi** (1963) M
8-04468
In 8-04466 : 979-1009

Comparative distribution of eggs, larvae and adults in relation to biotic and abiotic environmental factors. *Fr Es*

Discusses geographical distribution, vertical distribution, effects of environmental factors.

- Marr, J. C.** (1963) M
8-04469
In 8-04466 : 1011-1021
 Subpopulation identification. *Fr Es*

Discusses methodology, important advances, remaining problems.

- Hamre, J.** (1963) M
8-04470
In 8-04466 : 1023-39
 Size and composition of tuna stocks. *Fr Es*

Discusses methods of age determination, methods of calculating growth, growth estimates of tunas, recruitment and reproduction, mortality.

- Howard, G. V.** (1963) M
8-04471
In 8-04466 : 1041-55
 The matter of availability and the harvest of tunas. Fr Es

Discusses the problem, availability and oceanography, vulnerability and behavior, future research.

- Magnuson, J. J.** (1963) M
8-04472
In 8-04466 : 1057-66
 The behavior and physiology, a review. Fr Es

Discusses feeding behavior, schooling behavior, associations, migratory behavior, locomotion, reproductive behavior, sensory perception, physiology, methods of study, the future.

- Takayama, S.** (1963) M
8-04473
In 8-04466 : 1067-76
 Fishing techniques for tunas and skipjack. Fr Es

Discusses major types of fishing techniques, major types of fishing boats and their equipment, comparative effectiveness, selectivity of various types of gear, lines for future work.

- Schaefer, M. B.** (1963) M
8-04474
In 8-04466 : 1077-86
 Statistics of catch and effort required for scientific research on the tuna fisheries. Fr Es

Discusses uses of statistics of catch and effort, requirements, methods of collection of data, exchange of data and information; makes recommendations.

- Uda, M.** (1963) M
8-04475
In 8-04466 : 1087-95
 Future lines of tuna research, mainly in relation to fisheries oceanography. Fr Es

Discusses future prospects of tuna fishing areas, future lines of tuna research, what has been accomplished by tuna oceanography, tuna fisheries forecasting, methods of data collection.

- Chapman, W. M.** (1963) M
8-04476
In 8-04466 : 1097-1107
 World-wide tuna research planning. Fr Es

Discusses preceding tuna conferences, population dynamics, conservation problems, harvesting problems; makes recommendations.

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M

Da Fonseca, J. B. G. (1963)

8-04477

In 8-04466 : 1109-12

Preliminary experiments with tilapia as bait in the tuna fishery off the coast of Brazil. Fr Es

M

Nishimura, M. (1963)

8-04478

In 8-04466 : 1113-23

Investigation of tuna behavior by fish finder. Fr Es

Discusses fish finder for tuna investigation, identification of tuna, swimming depth, speed and school density.

M

Hamre, J. (1963)

8-04479

In 8-04466 : 1125-32

Tuna tagging experiments in Norwegian waters. Fr Es

Discusses tagging program, results.

M

Hamuro, C. (1963)

8-04480

In 8-04466 : 1133-42

Measurement of the shape of the tuna longline and an analysis of its efficiency. Fr Es

Discusses shape and hook-depth of longline, branch line movement and its hook rate, biting period and reaction of tuna, relation between water temperature and depth of hooked tuna, influence of waves on behavior of hooks.

M

De Vildoso, A. C. (1963)

8-04481

In 8-04466 : 1143-52

Estudios sobre la reproducción del bonito *Sarda chilensis* (C. & V.) en aguas adyacentes a la costa peruana (Studies of the reproduction of the bonito *Sarda chilensis* (C. & V.) in Peruvian waters). En Fr

Discusses methods, determination of the sexual cycle, type and presence of spawning, fertility.

M

Watson, M. E. (1963)

8-04482

In 8-04466 : 1153-4

Tunas (genus *Thunnus*) of the western North Atlantic. Part 1. Key to the species of *Thunnus* based on skeletal and visceral anatomy. Fr Es

Abstr. only. Issued also as: *Contr. Woods Hole oceanogr. Instn.* (1256).

AQUATIC STOCKS

Mather, F. J., III (1963) M
8-04483
In 8-04466 : 1155-7

Tunas (genus *Thunnus*) of the western North Atlantic. Part 2. Description, comparison and identification of species of *Thunnus* based on external characters. Fr Es

Co 8-04482. Abstr. only. Issued also as: *Contr. Woods Hole oceanogr. Instn.* (1257).

Mather, F. J., III (1963) M
8-04484
In 8-04466 : 1159-61

Tunas (genus *Thunnus*) of the western North Atlantic. Part 3. Distribution and behavior of *Thunnus* species. Fr Es

Co 8-04483. Abstr. only. Issued also as: *Contr. Woods Hole oceanogr. Instn.* (1258).

Suda, A., T. Koto & S. Kume (1963) M
8-04485
In 8-04466 : 1163-76

An outline of the tuna longline grounds in the Indo-Pacific (preliminary report). Fr Es

Discusses catch by spp., activities of longline vessels, productivity of the fishing ground and structure-distribution pattern of tunas.

Shomura, R. S. (1963) M
8-04486
In 8-04466 : 1177-99

Monofilament gill net fishing for skipjack tuna in Hawaiian waters (a progress report). Fr Es

Discusses background material, results of 1961 field trials; makes recommendations.

Seckel, G. R. (1963) M
8-04487
In 8-04466 : 1201-8

Climatic parameters and the Hawaiian skipjack fishery. Fr Es

Abramson, N. J. (1963) M
8-04488
In 8-04466 : 1209-15

A method for computing estimates and variances of relative log fishing powers of California albacore vessels. Fr Es

Discusses estimating log relative fishing power, variance of the estimates, application.

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- Craig, W. L.** (1963) M
8-04489
In 8-04466 : 1217-25
 The California albacore fishery logbook system. Fr Es
 Discusses logbook design, editing completed logs, machine processing and tabulation, use of logbook data.
- Johnson, J. H.** (1963) M
8-04490
In 8-04466 : 1227-35
 Changes in availability of albacore in the eastern Pacific ocean—1952 and 1953. Fr Es
 Discusses albacore fisheries and migrations in the North Pacific, southern fishery—1952 and 1958—northern fishery—1952 and 1958.
- Suda, A.** (1963) M
8-04491
In 8-04466 : 1237-77
 Structure of the albacore stock and fluctuation in the catch in the North Pacific areas. Fr Es
 Discusses composition of the albacore stocks in the North Pacific areas, available stock size in the northwestern Pacific, fluctuation in the catch in the northwestern Pacific, predictability of fishing conditions; makes recommendations.
- Nakagome, J. & S. Suzuki** (1963) M
8-04492
In 8-04466 : 1279-97
 Seasonal and annual variation of the hooking rate and annual variation of the catch-quantity of tuna and marlin in the tropical Atlantic Ocean. Fr Es
 Discusses material and method, seasonal and annual variation in hooking-rate, annual variation in catch-quantity per unit of operation (100 hooks).
- Kamimura, T. & M. Honma** (1963) M
8-04493
In 8-04466 : 1299-328
 Distribution of the yellowfin tuna *Neothunnus macropterus* (Temminck & Schlegel) in the tuna longline fishing grounds of the Pacific Ocean. Fr Es
 Discusses general features of distribution, distribution in relation to environment, seasonal variation, distribution of different size-classes, some consideration on the problem of sub-populations.
- Fitch, J. E. & P. M. Roedel** (1963) M
8-04494
In 8-04466 : 1329-42
 A review of the frigate mackerels (genus *Auxis*) of the world. Fr Es
 Discusses historical resumé, distinguishing characteristics.

AQUATIC STOCKS

- Pinkas, L.** (1963) M
8-04495
In 8-04466 : 1343-53
 Albacore scouting in the eastern North Pacific Ocean. Fr Es

Discusses exploratory fishing, eastern North Pacific albacore surveys.

- Mackett, D. J.** (1963) M
8-04496
In 8-04466 : 1355-66
 A method of sampling the Pacific albacore (*Thunnus germon*) catch for relative age composition. Fr Es

Discusses choice of sampling design, notation and definitions, choice of a sampling design with a fixed cost.

- Greenhood, E. C.** (1963) M
8-04497
In 8-04466 : 1367-79
 California's tuna record gathering system. Fr Es

Discusses fish receipts, licenses, catch origins, albacore logs, fish dealers' and processors' licenses, processors' reports, tabulated reports.

- Sprague, L. M., J. R. Holloway & L. I. Nakashima** (1963) M
8-04498
In 8-04466 : 1381-93
 Studies of the erythrocyte antigens of albacore, bigeye, skipjack, and yellowfin tunas and their use in subpopulation identification. Es Fr

Discusses materials and methods, blood-typing technique, nomenclature, serological findings, skipjack population studies.

- Greenhood, E. C. & S. P. Davis** (1963) M
8-04499
In 8-04466 : 1395-407
 Tuna landings and production 1916 to 1961. Fr Es

Discusses historical account.

- Shomura, R. S. & B. A. Keala** (1963) M
8-04500
In 8-04466 : 1409-17
 Growth and sexual dimorphism in growth of bigeye tuna (*Thunnus obesus*). A preliminary report. Fr Es

Discusses methods and materials.

- Yuen, H. S. H.** (1963) M
8-04501
In 8-04466 : 1419-29
 Schooling behavior within aggregations composed of yellowfin and skipjack tuna. Fr Es

Discusses sources and treatment of data and results.

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- M
8-04502
- Waldron, K. D. & J. E. King** (1963)
In 8-04466 : 1431-57
 Food of skipjack in the central Pacific. Fr Es
 Discusses source of materials, methods, results.
- M
8-04503
- Radovich, J.** (1963)
In 8-04466 : 1459-75
 Effects of water temperature on the distribution of some scombrid fishes along the Pacific coast of North America. Fr Es
 Discusses review of previous studies, additional relationships.
- M
8-04504
- Squire, J. L., Jr.** (1963)
In 8-04466 : 1477-514
 Distribution of tuna species in the oceanic northwest Atlantic. Fr Es
 Discusses review of knowledge to 1957, exploratory results, observed seasonal distribution of spp.
- M
8-04505
- Lima, F. R. & J. P. Wise** (1963)
In 8-04466 : 1515-21
 A first examination of the abundance and distribution of yellowfin and albacore tuna in the western tropical Atlantic, 1957 to 1961. Fr Es
En 8-04465. Discusses data, and methods of analysis, abundance, distribution.
- M
8-04506
- Clemens, H. B. & R. A. Iselin** (1963)
In 8-04466 : 1523-35
 Food of Pacific albacore in the California fishery (1955-1961). Fr Es
 Discusses collecting methods and areas, list of food spp.
- M
8-04507
- Clemens, H. B.** (1963)
In 8-04466 : 1537-48
 A model of albacore migration in the North Pacific Ocean. Fr Es
 Discusses the North Pacific fisheries, general albacore migrations, migration along east coast Japan, from the western into the eastern Pacific, along the American west coast, from the eastern into the western Pacific; discusses also larval and juvenile or age 0 albacore movements, age I, II, III, IV, V and older albacore movements.
- M
8-04508
- De Vildoso, A. C.** (1963)
In 8-04466 : 1549-56
 Especies del genero *Sarda* en el Pacifico oriental (Species of the genus *Sarda* in the eastern Pacific). En Fr
 Discusses validity of the spp. of the genus *Sarda* in the eastern Pacific.

AQUATIC STOCKS

M
8-04509

Blackburn, M. (1963)
In 8-04466 : 1557-82

Distribution and abundance of tuna related to wind and ocean conditions in the Gulf of Tehuantepec, Mexico. Fr Es

Discusses topographic and climatologic features of the region, oceanographic features of the gulf of Tehuantepec, hypothetical and actual distribution and abundance of tuna in the gulf.

M
8-04510

Griffiths, R. C. (1963)
In 8-04466 : 1583-605

Studies of oceanic fronts in the mouth of the Gulf of California, an area of tuna migrations. Fr Es

Discusses oceanographic cruises and results.

M
8-04511

Ancieta, F. (1963)
In 8-04466 : 1607-19

La pesquería del bonito en el Perú (The bonito fisheries in Peru). En Fr

Discusses fishing methods, grounds and seasons, production.

M
8-04512

Gooding, R. M. (1963)
In 8-04466 : 1621-31

The olfactory organ of the skipjack *Katsuwonus pelamis*. Fr Es

Discusses materials and methods, morphology, histology, experiments to determine water flow through the olfactory chamber.

M
8-04513

Wilson, P. T. (1963)
In 8-04466 : 1633-8

The past, present and future status of the tuna resources of the trust territory of the Pacific islands. Fr Es

Discusses skipjack and bait resources, fishing vessels, programs for fisheries development.

M
8-04514

Squire, J. L., Jr. (1963)
In 8-04466 : 1639-57

Thermal relationships of tuna in the oceanic northwest Atlantic. Fr Es

Discusses oceanographic characteristics of the areas explored, water temperatures in relation to tuna distribution.

Thomas, P. T. & M. Kumaran (1963)

M
8-04515

In 8-04466 : 1659-67

Food of Indian tunas. Fr Es

Discusses *Auxis thynnoides* Bleeker, *Auxis thazard* (Lacépède), *Katsuwonus pelamis* (Linnaeus), *Neothunnus macropterus* (Temminck & Schlegel), *Kishinoella tonggol* (Bleeker), *Euthynnus affinis affinis* (Cantor), *Sarda orientalis* (Temminck & Schlegel).

Raju, G. (1963)

M
8-04516

In 8-04466 : 1669-82

Spawning of the oceanic skipjack *Katsuwonus pelamis* (Linnaeus) in the Laccadive Sea. Fr Es

Ronquillo, I. A. (1963)

M
8-04517

In 8-04466 : 1683-752

A contribution to the biology of Philippine tunas. Fr Es

Discusses tunas caught by longline and surface swimming tunas caught by trolling.

Jones, S. & M. Kumaran (1963)

M
8-04518

In 8-04466 : 1753-74

Distribution of larval tuna collected by the Carlsberg Foundation's 'Dana' expedition (1928-30) from the Indian Ocean. Fr Es

Discusses geographical, seasonal, and vertical distribution.

Jones, S. & E. G. Silas (1963)

M
8-04519

In 8-04466 : 1775-96

Tuna and tuna-like fishes from the Indian seas. Fr Es

Discusses tentative key to the identification of tunas and related fishes from the Indian Ocean, double-lined mackerel, frigate mackerels genus *Auxis* Cuvier, *Auxis thazard* Lacépède, 1801, *A. thynnoides* Bleeker, 1855, *Cybiosarda elegans* Whitley, 1935, *Gymnosarda unicolor* Rüppel, *Thunnus* (T.) *thynnus orientalis* Temminck & Schlegel, *Thunnus* (T.) *alalunga* Bonnat-terre, 1788, *Thunnus* (Parathunnus) *obesus sibi* Temminck & Schlegel, 1844, *Kishinoella tonggol* Bleeker, 1851, *Thunnus* (Neothunnus) *albacares macropterus* T. & S., 1844, *Thunnus* (Neothunnus?) *itosibi* Jordan & Evermann, 1926, *Allothunnus fallai* Serventy, 1948, *Euthynnus affinis affinis* Cantor, 1850, *Katsuwonus pelamis* Linnaeus, 1758.

Marchal, E. (1963)

M
8-04520

In 8-04466 : 1797-811

Description des stades post-larvaires et juvéniles de *Neothunnus albacora* (Lowe) de l'Atlantique tropico-oriental (Description of post-larval and juvenile stages of *Neothunnus albacora* (Lowe) of the eastern tropical Atlantic). En Es

Discusses periods and sites of capture, hydrological conditions, biometry, development of post-larval and juvenile stages.

AQUATIC STOCKS

- Rodriguez-Roda, J.** (1963) M
8-04521
In 8-04466 : 1813-22

Resultados del programa de marcado de atún en aguas españolas (Results of the tuna tagging plan in Spanish waters). En Fr

Discusses material and methods, tagging and recaptures, migration.

- Rodriguez-Roda, J.** (1963) M
8-04522
In 8-04466 : 1823-34

Talla, peso, edad y crecimiento del atún del Golfo de Cadiz, España (Length, weight, age and growth of tuna from Golfo de Cadiz, Spain). En Fr

Discusses material and methods, length, weight, age and growth.

- Laevastu, T. & H. Rosa, Jr.** (1963) M
8-04523
In 8-04466 : 1835-51

Distribution and relative abundance of tunas in relation to their environment. Fr Es

Discusses temperature preference as related to surface water temperature, depth preference, relations to thermocline, diurnal migrations, seasonal migrations as affected by environment, relation to transparency of water, to abundance of food, to coasts and submarine topography, to meteorological factors.

- Duchâteau, C. H., M. Florkin & Ch. Jeuniaux** (1959) MF
8-04524
Arch. int. Physiol., 67 : 489-50

Amino acid components of tissues of crustaceans. 1. Amino acid components of the muscles of *Carcinus maenas* from time of passing from sea water to brackish water during molt

WFA 13 (3) : 47. Crustaceans—shrimps—chemical composition.

- Morović, D.** (1961) MF
8-04525
Proc. gen. Fish. Coun. Medit., 6 : 151-3

Distribution géographique du genre *Mugil* sur la côte orientale de l'Adriatique (Geographical distribution of the genus *Mugil* on the eastern Adriatic coast). En

CR 61-00422.

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Cooley, R. A. (1962)
Thesis, Univ. of Michigan, 359 p.

MF
8-04526

Decline of the Alaska salmon. A case study in resource conservation policy

DA 23 (2) : 686-7. Part 1 analyzes environmental setting to determine major factors which conditioned structure of industry and pattern of exploitation that resulted. Method used is primarily economic and statistical analysis. Part 2 traces historical development of federal conservation policies emphasizing major issues and conflicts that evolved, attitudes and activities of various interest groups and public policies that resulted, based on examination of written record as found in congressional hearings, committee reports, Congressional Record, official reports of government agencies, enacted laws and policy statements, newspapers and trade journals, and the writings, addresses, letters and reports of persons and organizations involved in the policy-formulating process supplemented by correspondence and interview with persons in government and business having knowledge of particular aspects of the study. Part 3 presents conclusions and evaluates their implications in terms of probable future of the resource under state government administration.

Laurie, A. (1962)
New. Scient., 16 (309) : 167
Physiology of deep diving

MF
8-04527

Re 8-03479. Contains reference to the blood gases of Antarctic blue and fin whales, where it seems likely that nitrogen fixation was achieved by means of an enzyme in the blood plasma. Questions whether such an enzyme could be isolated and injected into divers as an antidote to the bends.

Knoepfler, L.-P. (1961)
Vie et Milieu, 12 (3) : 517-28

MF
8-04528

Contribution à l'étude des amphibiens et des reptiles de Provence. 2. Généralités (2^e note) 1. (Contribution to the study of amphibians and reptiles of Provence. 2. Generalities (2nd note) 1.)

Co 62-02168. Origin of fauna, departmental herpetological distribution of fauna, key to the identification of species, vernacular names.

Théodoridès, J. & L. Laubier (1962)
Vie et Milieu, 13 (2) : 323-6

MF
8-04529

Selenidium mercierellae n. sp. (Archigregarina Selenidiidae) grégarine parasite du serpulien d'eau saumâtre *Mercierella enigmatica* Fauvel. (Note préliminaire) (*Selenidium mercierellae* n. sp. (Archigregarina Selenidiidae) a gregarine parasite of a brackish water serpulid, *Mercierella enigmatica* Fauvel. (Preliminary note))

Description of trophozoites and syzygies of the sp.

AQUATIC STOCKS

- Chugunova, N. I.** (1962) MF 8-04530
Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1118-20

The adaptive significance of structural changes in fish scales by means of the formation of annual and supplementary rings and spawning marks

En 62-05021. Special references to *Caspialosa*, *Cyprinus carpio* in Volga delta experimental farm, and salmon. Observations and physiological interpretation of 'depletion rings', 'condition rings', 'resorption scales', and spawning marks.

- Skrjabin, K. I. et al.** (Birron, A. & Z. S. Cole Transl.) (1961) MF 8-04531
 Jerusalem, Israel Program for Scientific Translations, 890 p.

Key to parasitic nematodes—Vol. 3: Strongylata

Keys with figures, systematic descriptions and a general review. The suborder includes some bird and seal parasites. *En* 1952, Skrjabin, K. I. et al. Available from Office of Technical Services, Department of Commerce, Washington, D.C.

- Ridgway, G. J., G. W. Klontz & C. Matsumoto** (1962) MF 8-04532
Bull. int. N. Pacif. Fish. Comm., (8) : 1-13

Intraspecific differences in serum antigens of red salmon demonstrated by immunochemical methods

- Fukuhara, F. M. et al.** (1962) MF 8-04533
Bull. int. N. Pacif. Fish. Comm., (8) : 15-109

Continental origin of red salmon as determined from morphological characters

- Sommani, E.** (1961) F 8-04534
Proc. gen. Fish. Coun. Medit., 6 : 63-70

Le *Salmo marmoratus* Cuv. dans l'Italie du Nord (*Salmo marmoratus* Cuv. in northern Italy). *En*

CR 61-00411.

- Maldura, C.** (1961) F 8-04535
Proc. gen. Fish. Coun. Medit., 6 : 203-6

Recherches préliminaires sur l'action de l'alkyl-aryl-sulfonate sur la truite arc-en-ciel (*Salmo irideus*) (Preliminary research on the action of sulfonate-alkyl-aryl on *Salmo irideus*). *En*

CR 61-00431.

- Sarig, S.** (1961) F 8-04536
Proc. gen. Fish. Coun. Medit., 6 : 207-12

Carp diseases, their prevention and treatment. *Fr*

CR 61-00432.

Volk, S. & D. Vesel (1961)

F

8-04537

Proc. gen. Fish. Coun. Medit., 6 : 325-7

La truite marbrée (*Salmo marmoratus* Cuv.) et sa reproduction artificielle (The marble trout *Salmo marmoratus* Cuv., and its artificial reproduction).
En

CR 61-00455.

Aksiray, F. (1961)

F

8-04538

Proc. gen. Fish. Coun. Medit., 6 : 335-43

About sudak (*Lucioperca sandra* Cuv. et Val.) introduced into some of the lakes of Turkey. Fr

CR 61-00457.

Lambou, V. W. (1961)

F

8-04539

Atlanta, Georgia, mimeo : 50 p.

Determination of fishing pressure from fishermen or party counts with a discussion of sampling problems

A detailed review of the subject with specific reference to reservoirs.

Kramer, R. H. (1962)

F

8-04540

Thesis, Univ. of Minnesota, 141 p.

The early life history of the largemouth bass, *Micropterus salmoides* (Lacépède), with special reference to factors influencing year-class strength

DA 23 (2) : 757. Study conducted from 1955 through 1958 at lake George, Anoka County, Minnesota, and adjoining sloughs used by largemouth bass for spawning. Approach to problem was to obtain indices of abundance at various times during the first year of life and to measure ecological factors as they were related to survival of eggs, fry, and fingerlings.

Smol'yanov, I. I. & E. V. Raikova (1962)

MF

8-04541

Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1049-52

The occurrence of sexually mature *Polypodium hydriforme* Ussov (Coelenterata) on sturgeon juveniles

En 62-05035. Life cycle of parasite of sturgeon spawn, not yet fully elucidated. Captures of free-living polyps have been made in the field. During 1956, free-living stages were found between 21 Jul. and 27 Aug. in the course of examining sturgeon larvae.

- F
8-01542
- Gun'ko, A. F., L. T. Karpus' & P. A. Samsonenko** (1962)
Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1093-4
 Incubating sturgeon at a controlled temperature

En 62-05022. Artificial control of optimal temperature of incubation in breeding stations may increase output, reduce expenditure on spawn, and enhance viability of larvae. Must first determine effect on spawn of its transfer into incubation apparatus having a temperature different from that of body temperature of parents, and find effect on larvae of transferring them to water at a temperature different from that in the incubation apparatus. In 1960, on Rogozhkinskii fish farm on the Don, by use of hypophysial injections obtained sturgeon spawn at temperatures close to spawning temperature.

- F
8-04543
- Zaika, V. E.** (1962)
Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1103-5
 The question of endemicity among the parasites of fish in lake Baikal

En 62-03986. Spp. of *Sphaerospora* (Myxosporidia), *Dactylogyrus* (Monogeneoidea) on *Phoxinus*, *Cobitis*, *Leuciscus*, *Brachymystax*, *Coregonus*. Author discovered more than 30 spp. not previously represented in the fauna of Baikal. Two new spp. and one subspecies having, apparently, different zoogeographical positions are given.

- F
8-04544
- Anders, F. et al.** (1961)
Experientia, 17 : 549-51
 (The genetic conditions for tumour production in viviparous tooth carp—Poeciliidae—and the free amino acid contents). *De*

IABS 26 (2) 4200. F_{1n} and F-R-hybrids of *Platyepocilus maculatus* and *Xiphophorus helleri* producing melanomase spontaneously, contain more free amino acids than the initial sp.

- F
8-04545
- Pequin, L.** (1962)
C.R. Acad. Sci., Paris., 255 (15) : 1795-7
 Les teneurs en azote ammoniacal du sang chez la carpe—*Cyprinus carpio* L. (The degree of ammonised nitrogen in the blood of carp—*Cyprinus carpio* L.)

Preliminary note on experiments to determine the part played by liver and gills in the elimination of ammonia.

- F
8-04546
- Dudel, J.** (1962)
Nature, Lond., 193 : 587-8
 Effect of inhibition of the presynaptic nerve terminal in the neuromuscular junction of the crayfish

IABS 26 (3) 6646. *Astacus fluviatilis*.

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Altukhov, Iu. P. (1961)

MF

8-04547

Tsitologiya, 3 : 598-600

(The influence of sex and age on the thermostability and the degree of serological affinity of muscle proteins in some fishes). *Ru*

IABS 26 (3) 6675. Investigated on two age groups of the northern shoal of mackerel and on the male and female of *Atherina hepsetus* (L).

F

Gonzalez, R. C., N. Longo & M. E. Bitterman (1961)

8-04548

J. comp. physiol. Psychol., 54 : 452-6

Classical conditioning in the fish; exploratory studies of partial reinforcement

IABS 26 (1) 2078. Goldfish conditioned to respond to light by pairing it with shock. Fish which always experienced shock 4.5 sec after light onset developed a higher response level than those with a longer delay before the shock, or shock on only half their trials.

F

8-04549

Emerit, M. & T. Mohsen (1961)

C.R. Soc. Biol., Paris, 155 : 1540-3

(Resistance and adaption of *Lebistes reticulatus* to increased salinity. A behavioural study). *Fr*

IABS 26 (1) 2086. Chose freshwater in preference to seawater. After adaptation to seawater, freshwater was again chosen. A marked change in salinity of inflowing water resulted in inclination of the body axis. Aeration increased the survival time in seawater.

F

8-04550

Richard, B. (1961)

Vie et Milieu, 12 (3) : 507-15

Le déblaiement chez le castor: rapport entre le déblaiement et la réalisation des canaux et des barrages (Excavations among the beavers: relation between the excavations and the construction of canals and dams)

F

8-04551

Wurtz, A. (1961)

Bull. franç. Piscic., 34 (202) : 5-12

Sur le traitement de la maladie infectieuse des carpes d'élevage en étangs (On the treatment of the infectious carp disease in ponds)

Description of disease, treatment with antibiotics and other methods.

F

8-04552

Schäperclaus, P. W. (1961)

Bull. franç. Piscic., 34 (202) : 13-23

Les maladies des poissons (Fish diseases)

Internal and external treatments.

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- Sánchez, J.** (1962) F
8-04553
Pesca, Lima (Yearb.), 1961-1962 : 127-33
 El paiche, gigante del Amazonas (The paiche, giant of the Amazon River)

Describes the life history, ecology and commercial use of the *Arapaima gigans*.

- Romero, J. S.** (1962) F
8-04554
Pesca, Lima (Yearb.), 1961-1962 : 111-8
 Peces peligrosos de la Amazonia peruana (Dangerous fishes in the Peruvian Amazon)

Notes on *Vandellia plazaii*, species of Serrasalminae, *Electrophorus electricus* and *Potamotrygon* sp.

- Nümann, W.** (1961) F
8-04555
Bull. franç. Piscic., 33 (201) : 133-6
 La transformation de truites de rivière marquées en truites de lac dans le lac de Constance (The conversion of marked stream trout into lake trout in the Lake of Constance)

- Gery, J. R.** (1961) F
8-04556
Bull. aquat. Biol., 2 (22) : 121-7
 Notes on the ichthyology of Surinam and other Guianas. 7. *Hyphessobrycon georgetti* n. sp., a dwarf sp. from southern Surinam

Diagnosis and description.

- Gery, J.** (1961) F
8-04557
Bull. aquat. Biol., 2 (19) : 93-112
 Contributions à l'étude des poissons characoïdes. 13. Structures et évolution des Anostominae (Contributions to the studies of characoid fishes. 13. Structure and evolution of Anostominae)

- Taliev, D. N.** (1961) F
8-04558
 PL-480 Int., 24 p.
 Serological analysis of the races of the baikal omul (*Coregonus autumnalis migratorius* (Georgi))

En 1941, Taliev, D. N. Descriptors: Serum, analysis, genetics, fishes, antibodies, antigens, classification, salmon. Available from Office of Technical Services, Department of Commerce, Washington, D.C.

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Taliev, D. N. (1961)

F
8-04559

PL-480 Int., 44 p.

Serological analysis of wild and domesticated forms of carp (*Cyprinus carpio* L.)

En 1946, Taliev, D. N. Descriptors: Fishes, carp, blood chemistry, serum, analysis, antibodies, genetics, biochemical genetics, growth. Available from Office of Technical Services, Department of Commerce, Washington, D.C.

Oetomo, S. (1959)

F
8-04560

Berita Perik., 11 (4-5-6) : 56-61

Ikan guramy (On *Osphronemus goramy* Lac.). *Bah Ind*

Only in Borneo the goramy is found in open waters. In eastern Java it is cultivated in ponds, in central and eastern Java also on paddy fields, both as a second crop and among the rice plants. Stocking schedules and calculations of costs and profit are given.

Sardjito, M. (1959)

F
8-04561

Berita Perik., 11 (4-5-6) : 117-9

Membiakkan ikan instalasi penjaringan air minum setjara perlahan-lahan di Makasar (Fish cultivation in the drinking water filters at Makasar). *Bah Ind*

In the sandfilters common carp and *Puntius javanicus* are cultivated. Eating algae, these carps prolong the lifetime of the filters, without increasing the number of bacteria of the concentration of dissolved organic substances, although the fish dig holes in the sand and deposit their excreta.

Yuan, H. K., Liu, H. H. & Hsu, H. T. (1959)

F
8-04562

K'un Ch'ung Hsüeh Pao (Chinese People's Republic), 9 : 2 p.

(A survey of mosquitoes in En-shih special district, Pu-ch'i Hsien, Yang-hsin Hsien, and Wuhan city of Hupeh province). *Ch*

Descriptors: Mosquitoes, disease carriers, classification, distribution, climatic factors, identification.

Yuan, H. K., Liu, H. H. & Hsu, H. T. (1961)

F
8-04563

JPRS : 10634, 9 p.

A survey of mosquitoes in En-shih special district, Pu-ch'i Hsien, Yang-hsin Hsien, and Wuhan city of Hupeh province

En 8-04562. Available from Office of Technical Services, Department of Commerce, Washington, D.C.

Sommani, E. (1962)

F
8-04564

Boll. Pesca Piscic. Idrobiol., 15 (2) : 190-3

Interessante caso di mostruosità in esemplare di tinca (*Tinca tinca* L.). (Interesting case of monstrosity in a specimen of tench: *Tinca tinca* L.). *It*

- Zanandrea, S. I. G.** (1959) F
8-04565
Boll. Zool., 26 : 545-54

Recenti ricerche sulle forme appaiate di lamprede dell'Italia e del Danubio (Researches on the paired forms of lampreys in Italy and in the Danube). *It En*

The paired lampreys live in the same basins, both in Italy and in the Danube, but the parasitic form inhabit the lower regions of the basins whereas the non-parasitic dwell in the upper.

- Cianficconi, F.** (1959) F
8-04566
Boll. Zool., 26 : 607-13

Il regime dietetico della basca del Trasimeno (*Rutilus rubilio* Bp. v. *rubella*—*Trasimenicus*) (Dietary habits of *Rutilus rubilio* Bp. v. *rubella* *Trasimenicus* in Trasimeno Lake). *It En*

Study of the intestinal contents.

- Hastings, C. E. & F. B. Cross** (1962)* F
8-04567
 Kansas Univ. Museum of Natural History, 21 p.

Farm ponds in Douglas County, Kansas, and their use in fish-production

- Aisa, E.** (1959) F
8-04568
Boll. Zool., 26 : 601-6

I tubercoli nuziali in *Rutilus rubilio* Bp. var. *rubella* (*Trasimenicus*) Bp. del Lago Trasimeno—Osservazioni macroscopiche ed istologiche (Macroscopical and histological observations performed on horny nuptial tubercles of *Rutilus rubilio* v. *rubella* Bp. of Trasimeno Lake). *It En*

Confirms the opinion of some previous workers according to whom these fishes represent a separated variety.

- Meier, A. H.** (1962) FG
8-04569
 Thesis, Univ. of Missouri, 86 p.

The effects of pitocin and pitressin on water and sodium movements in the euryhaline killifish, *Fundulus kansae*

DA 23 (2) : 676. In view of findings by Rasquin & Stoll (1955 & 1957) and by Arvy, Fontaine & Gabe (1954, 1955 & 1959) in which osmotic adjustments in teleosts were reflected by neurosecretory changes, an attempt was made to demonstrate an osmotic response to pitressin and pitocin injections. Hormone effects on water movements were tested by measuring the weight changes of renal papilla ligated female *F. kansae* held in tap water and hypertonic salt solutions.

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FG

8-04570

Balakhnin, I. A. (1962)

Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.), 141 (1-6) : 1063-4

A method of determining intra-species differences in trout blood

En 62-03905. Started with crossed reactions between trout sera and erythrocytes. Negative results were obtained. Tested ability of pig-blood to agglutinate trout erythrocytes, and found that it did so strongly in all forms tested. Method proposed is suitable for investigations under field conditions.

MISCELLANEOUS AND AUXILIARIES

M

8-04571

Miles, S. (1962)

London, Staples Press, 328 p.

Underwater medicine

Deals with various forms of diving, as well as the submarine; there are chapters on equipment, training and safety, in addition to the medical and physiological aspects. Nitrogen narcosis, oxygen poisoning and decompression sickness are treated in detail, and there is a chapter on drowning and its treatment.

M

8-04572

South Africa. Republic. Laws, Statutes, etc. (1962)

Govt Gaz. S. Afr., (169) : 1-6

Government notice No. R. 168. General sea-shore regulations made in terms of section 10 of the sea-shore act, 1935 (Act No. 21 of 1935).—2 February 1962. *En Af*

Prohibits *inter alia*, in certain areas of the sea-shore, to fish or angle, or leave any bait, fish-hook or refuse thereon.

M

8-04573

Spain. Laws, Statutes, etc. (1959)

Bol. ofic. Estado. Madr., (181) : 10309-35

Orden de 16 de julio de 1959 por la que se aprueba la reglamentación nacional de trabajo en la industria de la pesca del bacalao (Order approving national labour regulations for the cod-fishing industry.—16 July 1959)

Very detailed regulations respecting organization of work, classification of personnel, vocational training, etc.

M

8-04574

Spain. Laws, Statutes, etc. (1961)

Bol. ofic. Estado, Madr., (303) : 17866

Resolución de la dirección general de ordenación del trabajo por la que se da cumplimiento al artículo 121 de la reglamentación nacional de trabajo en la pesca de arrastre sobre gastos de explotación.—4 de diciembre de 1961 (Resolution giving effect to article 121 of the national labour regulations for trawl fishing with respect to operating costs.—4 December 1961)

Forbids unjustified increases in the operating costs of fishing vessels.

MISCELLANEOUS AND AUXILIARIES

M
8-04575

Spain. Laws, Statutes, etc. (1961)
Bol. ofic. Estado, Madr., (311) : 18342-4

Ley 144/1961, de 23 de diciembre, sobre reorganización de las enseñanzas náuticas y de pesca (Act No. 144/1961 relative to the reorganization of marine and fisheries instruction.—23 December 1961)

Extensive provisions.

M
8-04576

Spain. Laws, Statutes, etc. (1961)
Bol. ofic. Estado, Madr., (311) : 18345-7

Ley 147/1961, de 23 de diciembre, sobre renovación y protección de la flota pesquera (Act No. 147/1961 relative to the rehabilitation and protection of the fishing fleet.—23 December 1961)

Applies a plan for the renewal of the fishing fleet and its increase and provides for certain tax exemptions in that respect.

M
8-04577

Spain. Laws, Statutes, etc. (1961)
Bol. ofic. Estado, Madr., (311) : 18358-9

Ley 156/1961, de 23 de diciembre, sobre dotaciones del profesorado de las escuelas de náutica y de pesca (Act No. 156 relative to the provision of teaching staffs for marine and fisheries schools.—23 December 1961)

For corrections see: *Bol. ofic. Estado, Madr.*, (29) : 1643. 1962.

M
8-04578

Spain. Laws, Statutes, etc. (1961)
Bol. ofic. Estado, Madr., (13) : 647-8

Orden de 28 de diciembre de 1961 sobre salario inicial base en la reglamentación nacional de trabajo en las factorías bacaladeras (Order relative to the basic initial salary under the national labour regulations for cod processing plants.—28 December 1961)

M
8-04579

Spain. Laws, Statutes, etc. (1961)
Bol. ofic. Estado, Madr., (8) : 386

Orden de 28 de diciembre de 1961 por la que se da nueva redacción al artículo 125 de la reglamentación nacional de trabajo en la industria de la pesca del bacalao (Order redrafting article 125 of the national labour regulations for the cod fishing industry.—28 December 1961)

Ci 8-04573. Provides for a 6 per cent increase in the basic wage.

M
8-04580

Spain. Laws, Statutes, etc. (1961)
Bol. ofic. Estado, Madr., (11) : 551

Orden de 28 de diciembre de 1961 sobre salario inicial base en la reglamentación nacional de trabajo en las industrias de conservas y salazones de pescado (Order on the initial basic wage in the national labour regulations for the fish preserving and salting industries.—28 December 1961)

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Spain. Laws, Statutes, etc. (1962)

8-04581

Bol. ofic. Estado, Madr., (17) : 873

Decreto 7/1962, de 18 de enero de 1962, por el que se señala la cifra total de créditos para el desarrollo del plan de renovación y aumento de la flota pesquera y se dan normas para su concesión (Decree No. 7/1962 establishing the total amount of finance available for carrying out the plan for the rehabilitation and increase of the fishing fleet, and containing rules governing the grant of such finance.—18 January 1962)

Four billion pesetas from 1962 to 1971.

M

Spain. Laws, Statutes, etc. (1962)

8-04582

Bol. ofic. Estado, Madr., (33) : 1860

Resolución de la dirección de ordenación del trabajo por la que se señala, con carácter provisional, la plantilla mínima en las embarcaciones dedicadas a la pesca de arrastre.—18 de enero de 1962 (Resolution of the general directorate for the regulations of labour laying down provisionally the minimum crews on vessels engaging in trawl fishing.—18 January 1962)

Crew numbers shall be in accordance with the provisions of article 15 of the national labour regulations for the deep-sea fishing industry of 28 Oct. 1946.

M

Spain. Laws, Statutes, etc. (1962)

8-04583

Bol. ofic. Estado, Madr., (19) : 967-9

Orden de 19 de enero de 1962 por la que se dictan normas provisionales para la aplicación de la ley sobre renovación y protección de la flota pesquera de 23 de diciembre de 1961 (B.O.E. No. 311) (Order laying down provisional rules for the application of the act on the rehabilitation and protection of the fishing fleet of 23 December 1961.—19 January 1962)

Ci 8-04576. Lays down procedure to follow in applying for financial assistance.

M

Syrian Arab Republic. Laws, Statutes, etc. (1961)

8-04584

Rec. Lois Répub. arabe syr. (1) : 17-25

Décret législatif N° 154 du 3 décembre 1961, fixant le cadre et déterminant la mission de la direction générale des ports dans la République arabe syrienne (Legislative decree No. 154, establishing and prescribing the responsibilities of the general directorate for harbours in the Syrian Arab Republic.—3 December 1961)

Responsibilities include the application of the acts and orders and regulations relative to fisheries.

M

Tunisia. Laws, Statutes, etc. (1961)

8-04585

J. off. tunis., (58) : 1779

Arrêté du 27 décembre 1961 prohibant l'importation de certains produits de la mer et de leurs conserves (Order prohibiting the import of certain sea products and preserves thereof.—27 December 1961)

MISCELLANEOUS AND AUXILIARIES

U.K. Treaties, etc. (1960)

M
8-04586

Treaty Ser. U.K., (25) : 11 p.

Fishery agreement between the United Kingdom and the Kingdom of Norway.—17 November 1960

Up to 31 Oct. 1970, fishing vessels registered in the United Kingdom may continue to fish in the zone between the limits of 6 and 12 miles from the base line from which the territorial sea of Norway is measured.

U.K. Laws, Statutes, etc. (1961)

M
8-04587

Statut. Instrum. U.K., (1443) : 4 p.

The herring subsidy (United Kingdom) scheme, 1961, pursuant to the white fish and herring industries act, 1957 (a).—29 June 1961

Scheme for the payment of grants to the owners or charterers of fishing vessels not exceeding 140 feet in length engaged in catching herring.

U.K. Laws, Statutes, etc. (1961)

M
8-04588

Treaty Ser. U.K., (49) : 10 p.

Schedule to the international whaling convention, 1946.—July 1961

Revised to include the amendments that came into operation after the eleventh and twelfth meetings of the International Whaling Commission in London, 1959–1960.

U.K. Laws, Statutes, etc. (1961)

M
8-04589

Statut. Instrum. U.K., (2244) : 2 p.

The white fish and herring industries (grants for fishing vessels, engines, and conversions) (amendment) scheme, 1961, made pursuant to the white fish and herring industries act, 1953, as amended.—1 November 1961

The White Fish Authority may reduce or waive a repayment, in the event of a breach of any undertaking or condition, by a person who has received a grant.

U.K. Laws, Statutes, etc. (1961)

M
8-04590

Statut. Instrum. U.K., (2213) : 3 p.

The north-eastern sea fisheries district (variation of district) order, 1961.—17 November 1961

The order adjusts the boundaries of the north-eastern sea fisheries district and provides for the consequential exclusion of the borough council of Middlesbrough from the councils constituting the north-eastern sea fisheries committee.

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U.K. Laws, Statutes, etc. (1961)

8-04591

Statut. Instrum. U.K., (2417) : 2 p.

The white fish and herring subsidies (aggregate amount of grants) (No. 2) order, 1961, made pursuant to the white fish and herring industries acts, 1957-1961—29 November 1961

The aggregate amount of grants is increased to twenty-five million two hundred and fifty thousand pounds.

M

U.K. Laws, Statutes, etc. (1961)

8-04592

Statut. Instrum. U.K., (2448) : 4 p.

The white fish subsidy (United Kingdom) (Amendment) scheme, 1961, made pursuant to the white fish and herring industries acts, 1953-1961.—29 November 1961

Increases the grants payable for vessels fishing the middle water grounds in the vicinity of the Faroes.

M

U.S. Laws, Statutes, etc. (1962)

8-04593

Fed. Reg. U.S., 27 (17) : 740-1

Code of federal regulations, title 21—chap. 1—subchap. B: Food and food products—part 37: Fish, definitions and standards of identity; Standards of fill of container. Fish flour; Identity.—22 January 1962

M

Anon. (1962)

8-04594

Industr. pesq., Vigo, 36 (847) : 274

Nuevo reglamento de la pesca de arrastre (New regulations of the trawl fishery)

Text of new law establishing regulation.

M

Callame, B. (1960)

8-04595

Trav. Cent. Rech. Étud. océanogr., 3 (3) : 19-26

Caractères physico-chimiques et biologiques de la station de corrosion de la Rochelle (Physico-chemical and biological characteristics of the corrosion station of La Rochelle)

Description of the location and hydrology of the station, characteristics and meteorological conditions at La Rochelle, notes on fixation of sessile invertebrates and algae.

M

Hache, A. (1960)

8-04596

Trav. Cent. Rech. Étud. océanogr., 3 (3) : 29-40

La corrosion de l'acier en eau de mer (Corrosion of steel in sea water)

Results of experiments carried out during five years in the laboratory of Saint-Germain-en-Laye, and experimental station of La Rochelle and Biarritz.

MISCELLANEOUS AND AUXILIARIES

Romanovsky, V. (1960) M
8-04597
Trav. Cent. Rech. Étud. océanogr., 3 (3) : 53-61

Essai d'étalonnage des stations françaises de corrosion marine (Attempt to standardise the French stations concerned with marine corrosion)

Attempt to standardize methods and activities.

IOF (1962) M
8-04598
Sea Frontiers, 8 (3) : 130-190

This issue contains the following semipopular articles: Let's close the gap; Living sonar; Urchin killer; The dolphin fish; FLIP ship for Scripps; Neglected ocean; Science of the sea in books.

Carlisle, J. G., Jr. (1962) M
8-04599
Sea Frontiers, 8 (2) : 68-75
Housing scheme for fishes

Results of recent experiments on ocean habitat development, especially off California.

Abbamonte, G. (1962) M
8-04600
Riv. tec.-giur. Pesca, 3 (1) : 28-42

Le leggi penali siciliane e la libertà del commercio ittico all'esame della corte costituzionale (The Sicilian penal laws and the freedom of fish-trade examined by the constitutional Court). *It*

Rohlf, G. (1962) M
8-04601
Boll. Atlante ling. Medit., (2-3) : 7-18

Terminologia marinaresca nel Salento. 2. Nomi di pesci e di molluschi (Note lessicali ed etimologiche) (Marine terminology in Salento. 2. Names of fish and shellfish—Lexical and etymological notes). *It*

List of dialectal names with their Italian explication.

Francescato, G. (1962) M
8-04602
Boll. Atlante ling. Medit., (2-3) : 19-24

Un esperimento sull'assenza di terminologia marittima in friulano (Research on the absence of maritime terminology in Friulan). *It*

Petkanov, I. (1962) M
8-04603
Boll. Atlante ling. Medit., (2-3) : 25-42

Esperienze sulla costa bulgara del Mar Nero col questionario dell'ALM (Experiences on the Bulgarian coast of the Black Sea with the ALM questionnaire). *It*

List of maritime terms collected in the towns of Varna and Sozopol.

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- M
8-04604
- Sala, M.** (1962)
Boll. Atlante ling. Medit., (2-3) : 43-54
 Esperienze a Costanza col questionario dell'ALM (Experiences at Constanța with the ALM questionnaire). *It*
 Origin of the Rumanian maritime terminology.
- M
8-04605
- Caferoglu, A.** (1962)
Boll. Atlante ling. Medit., (2-3) : 55-60
 Preliminary outline on the ethnocentric description of Turkey by connection with the publication of the ALM
 Different civilization and language regions in the districts of Turkey; Turkish fish names and their origin.
- M
8-04606
- Alessio, G.** (1962)
Boll. Atlante ling. Medit., (2-3) : 139-48
 Note etimologiche sulla terminologia marinaresca (Etymological notes on maritime terminology). *It*
 Discusses some Italian dialect fish names and nautical terms.
- M
8-04607
- Cortelazzo, M.** (1962)
Boll. Atlante ling. Medit., (2-3) : 165-8
 Voci nautiche turche di origine italiana e greca in antichi lessici bilingui (Turkish nautical terms of Italian and Greek origin in ancient bilingual lexicons). *It*
- M
8-04608
- Altbauer, M.** (1962)
Boll. Atlante ling. Medit., (2-3) : 169-74
 Della lingua dei pescatori israeliani (On the language of Israel's fishermen). *It*
- M
8-04609
- Sakhno, P. & I. Fyodorov** (1962)
Sea Frontiers, 8 (2) : 117-20
 Soviet oil fields in the sea
 Article on the Caspian oil fields.
- M
8-04610
- Allen, E. W.** (1962)
Sea Frontiers, 8 (2) : 109-15
 Fighting for fish
 Article on international fisheries problems and legislation, with special reference to North Pacific.

Spain. Laws, Statutes, etc. (1961)

MF
8-04611

Bol. ofic. Estado, Madr., (304) : 17910-5

Decreto 2559/1961, de 30 de noviembre, por el que se aprueba la nueva reglamentación para la explotación de viveros de cultivo, situados en la zona marítima (Decree 2559/1961 approving the new regulations for fish culture activities in the coastal area.—30 November 1961)

Extensive legislation designed to improve the quality of fish, particularly of shellfish.

Spain. Laws, Statutes, etc. (1961)

MF
8-04612

Bol. ofic. Estado, Madr., (308) : 18093-4

Orden de 13 de diciembre de 1961 por la que se autoriza el empleo del instrumento denominado "horquilla" para la captura de la navaja o longueirón (Order authorizing the use of the fishing equipment known as "fork" for the purpose of catching razor-shells or razor-clams.—13 December 1961)

Prescribes conditions under which such equipment may be used, with a view to protecting shellfish and oyster beds.

Spain. Laws, Statutes, etc. (1962)

MF
8-04613

Bol. ofic. Estado, Madr., (49) : 2781

Resolución de la dirección general de montes, caza y pesca fluvial disponiendo periodos hábiles para la pesca del salmón y de la trucha.—26 de enero de 1962 (Resolution of the general directorate for mountains, hunting and river fisheries laying down salmon and trout fishing seasons.—26 January 1962)

The salmon season runs from 4 Mar. to 18 Jun. and the trout season from 4 Mar. to 15 Aug. 1962.

Sweden. Laws, Statutes, etc. (1961)

MF
8-04614

Svensk FörfSaml., (519-520) : 1309

Kungl. maj:ts kungörelse Nr 519 om undantag från förbudet mot ljusterfiske.—10 november 1961 (Royal order No. 519, providing for exceptions to the prohibition of harpoon fishing.—10 November 1961)

In prescribed waters.

Switzerland. Laws, Statutes, etc. (1961)

MF
8-04615

Rec. Lois féd., Berne, (2) : 7-9

Arrêté fédéral concernant la perception d'une taxe sur les carburants pour moteurs destinés à financer à titre complémentaire les routes nationales.—29 septembre 1961 (Federal order relative to the collection of a tax on motor fuels, to provide supplementary finance for the national road system.—29 September 1961)

Such tax shall be refunded if fuels are used for agriculture, forestry or fishery purposes.

- Switzerland. Laws, Statutes, etc. (1962)** MF 8-04616
Rec. Lois. féd., Berne, (2) : 11-8

Arrêté du conseil fédéral réglant l'exécution de l'arrêté fédéral qui concerne la perception d'une taxe sur les carburants pour moteurs destinés à financer à titre complémentaire les routes nationales.—5 janvier 1962 (Order of the federal council governing execution of the federal order relative to the collection of a tax on motor fuels, to provide supplementary finance for the national road system.—5 January 1962)

Co 8-04615. Prescribes in detail in which cases the tax shall be refunded, i.e. if fuels are used for agricultural, forestry or fishery purposes.

- U.K. Laws, Statutes, etc. (1961)** MF 8-04617
Statut. Instrum. U.K., (1931) : 6 p.

The lead in food regulations, 1961, pursuant to the food and drugs act, 1955 (a).—9 October 1961

Restrict the amount of lead which may be present in food (including fish products) intended for sale for human consumption.

- U.K. Laws, Statutes, etc. (1961)** MF 8-04618
Statut. Instrum. U.K., (260) : 2 p.

The Cumberland River Board (fisheries) order, 1961, made under the salmon and freshwater fisheries act, 1923 and the river boards act, 1948.—15 December 1961

Enables the Cumberland River Board to fix the annual trout or char close season.

- Morsillo, G. (1962)** MF 8-04619
Riv. tec.-giur. Pesca, 3 (2) : 160-86

Usi civici di pesca e diritti esclusivi (Civic and exclusive fishing rights). *It*

- Bellini, L. (1962)** MF 8-04620
Riv. tec.-giur. Pesca, 3 (3) : 285-309

La legislazione speciale delle Valli di Comacchio nella sua genesi storica, nelle fonti e nell'applicazione (The special legislation for the Comacchio valleys in its historical genesis, in its sources and in its application). *It*

- Mundula, G. (1962)** MF 8-04621
Riv. tec.-giur. Pesca, 3 (3) : 310-7

Sui termini per la presentazione delle domande di riconoscimento di diritti esclusivi di pesca (On the conditions for the presentation of requests for the reappointment of exclusive fishing rights). *It*

Interpretation and discussion of the Italian legislation.

MF

8-04622

Battisti, C. (1962)

Boll. Atlante ling. Medit., (2-3) : 61-96

Sui grecismi dell'itti nimia latina (On the graecisms of Latin fish names).
It

First part of an etymological study.

MF

8-04623

Ineichen, G. (1962)

Boll. Atlante ling. Medit., (2-3) : 97-106

Italienische Fischnamen bei Jovius (Italian fish names from Jovius)

F

8-04624

Balchin, W. G. V. (1962)

New Scient., 16 (308) : 108

Conserving the world's water

Final report of the Water Research Programme organized under Professor Arthur Maass to work out methods of choosing the right and most economic design method of multi-unit, multi-purpose water resource development in any given river basin. The greater part of the book is devoted to a detailed presentation of method and techniques for translating design criteria into actual designs by means of combined economic and engineering analysis. New methods of river system design and a comparison with those now in use are featured.

F

8-04625

Féchant, M. (1961)

Bull. franç. Piscic., 34 (202) : 24-41

Bibliographie des ouvrages et articles de périodiques de langue française relatifs à la pisciculture (Bibliography of monographs and articles from French periodicals on fishculture)

Bibliography on environment and pollution.

F

8-04626

Féchant, M. (1961)

Bull. franç. Piscic., 33 (201) : 144-61

Bibliographie des ouvrages et articles de périodiques de langue française relatifs à la pisciculture... Suite (Bibliography of monographs and articles of French periodicals on fishculture. Continuation)

Co 8-04625. Artificial fertilization, feeding, stocking, acclimatization, equipment and methods of fishculture.

G

8-04627

Thom, A. & C. J. Apelt (1961)*

London, D. Van Nostrand Co. Ltd., 165 p.

Field computations in engineering and physics

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Tanner, W. F. (1962)

G
8-04628

J. sediment. Petrol., 32 (1) : 147-8

Field computations in engineering and physics

Re 8-04627. Discusses numerical analysis of continuously variable fields by finite difference formulae and related approximation methods.

Anon. (1962)

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J. sediment. Petrol., 32 (1) : 150-75

Members of the society of economic paleontologists and mineralogists

Names and addresses of 1712 members.

Hamblin, W. K. (1962)

G
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J. sediment. Petrol., 32 (2) : 201-10

X-ray radiography in the study of structures in homogeneous sediments

Ill. Techniques for determining the distribution of minerals, fabric, fractures, stratification and other structural features of rock.

Morris, W. J. & Pew-Foong Fan (1962)

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J. sediment. Petrol., 32 (2) : 226-30

Abrasion effects on arkose mixtures

The weight loss of quartz and potash feldspar grains was determined after intervals in an artificial abrasion apparatus. Concludes that mixtures of quartz-feldspar grains abrade more readily than samples of a single component.

Delgado, R. R. & J. M. R. Delgado (1962)

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Phil. Sci., 29 (3) : 253-68

An objective approach to the measurement of behavior

Detailed consideration of theoretical problems in the measurement of behavior, including a classification of individual and social behavioral responses.

Maxwell, G. (1962)

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Phil. Sci., 29 (2) : 132-8

Theories, frameworks and ontology

Contribution to conceptual frameworks wherein the truth value of propositions may be resolved on other than purely linguistic grounds. A schema for evaluating scientific theories is broadly outlined.

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- Buşniţă, Th.** (1961) M
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Cercetări ihtiologice marine româneşti din ultimii cinci ani (1954-1959) (Roumanian marine ichthyological studies from 1954 to 1959). *Ro Ru Fr*

A review of the work accomplished, outlining future lines of investigation using newly available research facilities.

- FAO Working Party for Rational Utilization of Tuna Resources in the Atlantic Ocean. First session, FAO, Rome: 25-30 October 1963** (1963) M
8-05003
FAO Fish. Rep., (13) : 23 p.

Report of the . . .

Pr 62-086me. Explains background, objectives and organization, results achieved, conclusions and recommendations obtained. Incl. lists of officers of the meeting, participants and working and information papers presented.

- Fourmanoir, P. & A. Crosnier** (1961)* M
8-05004
Madagascar, I.O.R.S.T.O.M: Centre de Nosy-Be

Rapport sur la campagne de pêche au thon à la palangre dérivante, faite par le 'Maran Atha' dans les environs de Majunga (Côte nord-ouest) du 21 septembre au 15 octobre 1961 (Report on the longline fishing cruise made by the 'Maran Atha' in the neighbourhood of Majunga (northwest coast) from 21 September to 15 October 1961)

Stoianov, S. (1961)M
8-05005*Hidrobiol., Bucharest, (3) : 99-114*

Rezultaty gidrobiologicheskikh, gidrologicheskikh i ikhtiologicheskikh issledovaniy, provedennykh v N.R. Bolgarii, za period 1954-1959 gg. (Results of hydrobiological, hydrological and ichthyological investigations carried out by the National Republic of Bulgaria, during the year 1954-1959).
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France. Office de la Recherche Scientifique & Technique Outre-Mer (1961)M
8-05006*Rapp. Croisière Inst. franç. Océanie, (4) : 29 p.*

'Orsom III'—Compte-rendu des croisières de l'année 1960 ('Orsom III'—Report of the cruises during 1960)

Report on cruises carried out for oceanographic observations, primary production and zooplankton, and fisheries research.

Crisp, D. J. (1961)M
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France. Institut Scientifique & Techniques des Pêches Maritimes (1959)M
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Programme de la campagne du 'Président-Théodore-Tissier'—premier trimestre 1959 (Program of the cruise of the 'Président-Théodore-Tissier'—first trimester 1959)

France. Institut Scientifique & Technique des Pêches Maritimes (1962)M
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Rapport préliminaire sur la campagne de la 'Thalassa' en mer de Norvège et mer de Barents, 29 octobre-15 décembre 1961 (Preliminary report on the cruise of the 'Thalassa' in the Norwegian and Barents Seas—28 October-15 December)

Organization of cruise, areas investigated, and results.

- Humphrey, G. F.** (1962) M
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 The role of UNESCO in the development of oceanography

Work of UNESCO's International Advisory Committee on Marine Sciences; its Intergovernmental Conference on Oceanographic Research, and formation of its Intergovernmental Commission on Oceanography.

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8-05012
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 Biology of the White Sea

Translation of two articles and the table of contents from *Biologiya Belogo moria*, Moscow, v. 1, 1962. Incl. bibliographies.

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8-05013
 Tokyo, Ministry of Forestry and Agriculture
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- Anon.** (1962) MG
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 NATO proposal for a great science institute

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Mem. Cons. Invest. hidrobiol. Callao, 1961 : 28 p. 8-05021
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- Includes field ecological studies on size of *Gammarus* in fast and slow streams; growth of *Limnaea*, breeding and feeding habits of three-spined stickleback; and length-weight relationship in perch at Malham Tarn.

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Zur Anwendung der Direktbeobachtung in der Hydrobiologie mittels autonomer Tauchgeräte (On the applications in hydrobiology of direct observations made by the autonomous diving suit). Ro

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Observații asupra condițiilor hidrologice din zona bosforică a Mării Negre, în primăvara anului 1959 (Observations made during the spring of 1959 on the hydrological conditions of the Bosphorus zone of the Black Sea). Ro Ru Fr

Study of currents and salinity and zooplankton, with observations on movements of Mediterranean waters in the Black Sea.

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Rezultaty gidrobiologicheskikh issledovani, provedennykh SSSR v 1954-1959 gg. na Chernom more, preimushchestvenno v ego severo-zapadnoi chasti (Results of hydrobiological investigations carried out by USSR in the years 1954-1959 in the northwestern part of the Black Sea). Ro

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Hinschberger, F. (1962)

C.R. Acad. Sci., Paris, 255 (20) : 2629-34

Résultats de 14 stations hydrologiques dans l'Iroise et à ses abords (Results from 14 hydrological stations in the Iroise and its adjoining areas)

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Action de quelques oxydes métalliques sur la division et régénération des Ophryoglenidae (Protozoaires ciliés) (Action of some metallic oxides on the division and regeneration of Ophryoglenidae (ciliated protozoans))

Preliminary note on the effect of GeO_2 and Mo_6O_{17} .

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(The discovery of submerged highlands on the sea bottom of the Indian Ocean). *Ru*

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The discovery of submerged highlands on the sea bottom of the Indian Ocean

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A portable temperature indicator

Oceanographic instruments.

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Dept. of Oceanography & Meteorology (1962)
 Summary report—Cruise 62-H-10, July 17–August 13, 1962: Galveston,
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Kautsky, H. (1961)
Dtsch. hydrogr. Z., 14 (4) : 121–35
 Über Herkunft, Verteilung und Nachweismöglichkeit künstlich radio-
 aktiver Stoffe im Meer (On the origin, diffusion and methods of tracing
 artificial radioactive material in the sea). En Fr

Based on literature summarizing outline is given discussing present prob-
 lems and danger of radioactive material in sea.

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Schmitz, H. P. (1961)
Dtsch. hydrogr. Z., 14 (4) : 135–52
 Existenzbedingungen für stationäre und beschleunigungsfreie Strömungs-
 felder auf der rotierenden Erde, Insbesondere am Äquator (Conditions of
 existence of stationary current fields without acceleration on the rotating
 earth, especially along the equator). En Fr

Presence of vanishing horizontal pressure gradient along equator may
 admit of current which owes its formation to balanced action of Coriolis
 force and pressure field. Taking friction into account, horizontal currents
 without acceleration found to occur along equator, accompanied by meridional
 convergence or divergence. Results are in contradiction to opinion that
 stationary fields of ocean currents are approximately free of acceleration and,
 hence, are geostrophic.

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Walden, H. & R. Höhn (1961)
Dtsch. hydrogr. Z., 14 (4) : 152–8
 Über den Ursprung der Roller vor Ascension (On the origin of the rollers
 off the Island of Ascension). En Fr

From weather maps days are computed on which from 1943 to 1954 high
 swell waves from northern North Atlantic were expected. Computed 'arrival
 dates' confronted with days on which rollers observed near shore of Ascension.
 Result leads to conclusion that part of the rollers were produced in the storm
 area of the North Atlantic.

Wüst, G. (1961)

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Dtsch. hydrogr. Z., 14 (3) : 81-92

Das Bodenwasser und die Vertikalzirkulation des Mittelländischen Meeres
(The bottom water and the vertical circulation of the Mediterranean Sea).
En Fr

Co 61-10741. Continues studies of deep circulation with regard to distribution and mixing in bottom water at depths of 1500 m and more. Detailed verification of observational material comprising 234 stations of 11 research vessels is presented and further proofs concerning formation of North Balearic and Adriatic bottom water are given. Schematic diagram shows vertical circulation and salinity distribution and combined action of their zonal and meridional components during winter. As a supplement to 1960 paper, chart is added showing core layers of the "levantine intermediate water" based on 'Armauer Hansen' stations from May and Jun. 1931.

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Groen, P. (1961)*Dtsch. hydrogr. Z.*, 14 (3) : 93-8

The K.N.M.I.-method of forecasting wind induced sea level height disturbances. De Fr

Method used at Koninklijk Nederlands Meteorologisch Instituut (De Bilt) for forecasting effects of the wind on sea level heights along the southern coast of the North Sea is described briefly, mainly from the practical side.

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Christoph, P. (1961)*Dtsch. hydrogr. Z.*, 14 (3) : 98-113

Der Arma-Brown-Kreiselkompass—Aufbau und Eigenschaften (The Arma-Brown gyro-compass—its structure and properties). En Fr

Deals with principles of construction, technical design and properties. Report given on test results from laboratory and, in particular, of a test at sea.

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Toba, Y. (1961)*J. oceanogr. Soc. Japan*, 17 (4) : 169-78

(Drop production by bursting of air bubbles on the sea surface. 3. Study by use of a wind flume (short report)). Ni En

Measurement of small droplets produced by bursting of air bubbles entrained in wind waves and determination of the production rate of droplets of each size grade.

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Takane, K. (1961)*J. oceanogr. Soc. Japan*, 17 (4) : 179-89

Circulation générale permanente dans les océans—deuxième partie (suite et fin) (General permanent circulation of the ocean—2nd part (continuation and end)). En

Results of numerical calculations of wind-driven circulation and convective circulation produced by density distribution at the surface.

Takane, K. (1961) M
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J. oceanogr. Soc. Japan, 17 (4) : 190-6

Distribution de densité à la surface d'un océan de longueur indéfinie en fonction de la latitude (Distribution of density at the surface of an ocean of indefinite length as a function of latitude). En

Determination of surface density in a canal indefinitely [*sic*] extended in east-west direction and subject to wind stress and heat flux from sun and atmosphere, assuming constancy of salinity.

Moriyasu, S. (1961) M
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J. oceanogr. soc. Japan, 17 (4) : 197-200

On the difference in the monthly sea level between Kushimoto and Uragami, Japan

Examination of relation between sea level and current pattern.

Imai, Y. (1961) M
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J. oceanogr. Soc. Japan, 17 (4) : 201-4

(Oceanographical studies on the behaviour of chemical elements. 6. On the distribution of molybdenum in sea water in Uranouchi Bay and Susaki Bay). *Ni* En

Analytical results and examination of relation between molybdenum and chlorinity. Co 62-02985.

Imai, Y. (1961) M
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J. oceanogr. Soc. Japan, 17 (4) : 205-7

(Oceanographical studies on the behaviour of chemical elements. 7. On the distribution of molybdenum in sea water in Urado Bay). *Ni* En

Co 8-05048. Continuation of previous paper extending study of relations to dissolved oxygen and iodine.

Koshimizu, N. (1961) M
8-05050
J. oceanogr. Soc. Japan, 17 (4) : 208-14

(The study of chlorinity determination. 1. The error in the chlorinity determination by the Knudsen method and the method of calculation of k). *Ni* En

Examination of the importance of titration and drop error to the correction factor k in Knudsen's tables, and a table of recalculated values of k .

Ridgway, N. M. (1962) M
8-05051
N.Z.J. Geol. Geophys., 5 (2) : 243-55

Tidal current patterns between Mana Island and Titahi Bay, west coast, North Island

Observations of surface water movements in a coastal channel using fluorescein dye. Time of change of direction of the tidal stream is compared with time of high water, and circulation patterns within Titahi Bay are related to direction of tidal currents through the channel .

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Cullen, D. J. (1962)

N.Z.J. Geol. Geophys., 5 (2) : 271-5

The influence of bottom sediments upon the distribution of oysters in Foveaux Strait, New Zealand

Investigation of the sediments in Foveaux Strait has revealed a clear correlation between the distribution of the oyster beds and the occurrence of medium to fine sandy pebble gravel.

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Tsuchiya, M. (1961)

Oceanogr. Mag., Tokyo, 13 (1) : 1-30

An oceanographic description of the equatorial current system of the western Pacific

Based on oceanographic data obtained in the western Pacific during 1925-1941, and using geostrophic computations, describes the equatorial current system, the equatorial countercurrent and undercurrent, and the south equatorial current and the equatorial upwelling.

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Konaga, S. (1961)

Oceanogr. Mag., Tokyo, 13 (1) : 31-40

Kurushio in Enshu-nada (111)—Variations of the depth of isotherms

Examination of the relation between oceanographic conditions in the cold water region off Enshu-nada and the variation in the depth of isotherms of period the same as that of the ordinary tide.

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Yasui, M. et al. (1961)

Oceanogr. Mag., Tokyo, 13 (1) : 41-9

Soundings of the Kamapo Deep

Summary of the results of sounding operations in Jun. 1960.

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Oceanogr. Mag., Tokyo, 13 (1) : 51-75

Theoretical investigations of typhoon surges along the Japanese coast

Computation of typhoon-surge distributions in Tokyo, Osaka and Ise Bays by a numerical method based on hydrodynamic equations and integration of each equation numerically by giving the terms of external forces.

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Anon. (1962)

Results mar. Obsns, Tokyo, (28)

Tables and charts presenting results of observations in Japanese seas, Jun.-Dec. 1960.

Vella, P. (1962) M
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Tuatara, 10 (1) : 19-40

Determining depths of New Zealand tertiary seas; an introduction to depth paleoecology

Discussion of scope and methods of paleoecology; depth distribution of present-day marine organisms; determination of fossil biofacies and their depth order.

Mackin, J. G. & A. K. Sparks (1962) M
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Publ. Inst. Mar. Sci. Univ. Tex., 7 (1961) : 230-61

A study of the effect on oysters of crude oil loss from a wild well

Reports the results of comparison of oyster growth and survival in areas affected by oil spill and in control stations.

Mackin, J. G. & S. H. Hopkins (1962) M
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Publ. Inst. Mar. Sci. Univ. Tex., 7 (1961) : 1-131

Studies on oyster mortality in relation to natural environments and to oil fields in Louisiana

Summarizes researches and findings on the Louisiana oyster industry and its history, the environmental conditions in the area where oyster mortality was claimed, and the interrelationships of the oil and oyster industries in that area.

Brenot, R. (1962) M
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Rev. Trav. Inst. Pêches marit., 26 (3) : 369-74

Sur un point de topographie dans le détroit de Sicile (parages de l'île Julia) (On a topographic place in the strait of Sicily (Julia Island area))

Topographic and hydrographic observations.

Furnest, J. & C. Allain (1962) M
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Rev. Trav. Inst. Pêches marit., 26 (3) : 309-17

Nouvelles observations sur l'hydrologie de la Méditerranée occidentale (entre Alger et la 40° parallèle). Campagne de la 'Thalassa', hiver 1961 (New hydrological observations of the western Mediterranean (between Algiers and 40th parallel). Cruise of the 'Thalassa', winter 1961)

Hydrological sections.

Furnest, J. & A. Allain (1962) M
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Rev. Trav. Inst. Pêches marit., 26 (3) : 277-308

L'hydrologie algérienne en hiver. (Campagne du 'Président-Théodore-Tissier', février 1960) (Algerian hydrology in the winter. (Cruise of the 'Président-Théodore-Tissier', February 1960))

Salinity and temperature charts at various depths, regional hydrological sections.

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Cah. Inform. Sta. Biol. mar. Grande-Rivière, (15) : unpag.

Observations océanographiques dans la Baie-des-Chaleurs, juin-septembre 1961 (Oceanographic observations in the Chaleur Bay, June-September 1961)

Temperature, salinity, bathythermographs at 16 stations.

Anon. (1962)

8-05065

New Scient., 16 (313) : 362-3

Experience in weather forecasting by computer

Short notice on an attempt to predict the configuration of the following day's chart, by wholly numerical means using a computer.

Gavrilescu, N. (1961)

MF
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Hidrobiol., Bucharest, (3) : 147-76

Cîteva metode noi și observații privind studiul depunerilor aluvionare la gurile Dunării. (New methods of study and observations on alluvial deposits of the mouth of the Danube). Ro Ru Fr

A study of the effect of run off of rivers on the ecology of sea waters, based on observations at the mouth of the Danube.

Fujiya, M. (1962)

MF
8-05067

Bull. Naikai Fish. Res. Lab., (17) : 1-87

(Physiological studies on the effects of pulp mill wastes to aquatic organisms). Ni En

Physiological investigation of the effects of these pollutants on fish, bivalves and algae. Hematological, serological, histo-pathological and cyto-chemical investigations were carried out on the fish and bivalves.

Botnariuc, N. & S. Beldescu (1961)

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8-05068

Hidrobiol., Bucharest, (2) : 161-242

Monografia complexului de bălți Crapina-Jijila (Monograph on the pond complex Crapina Jijila). Ro Ru Fr

Hydrobiological study of an area of the Danube subjected to periodic flooding.

Krinsley, D. B. (1961)

F
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Polarforschung, Bd. 5, Jahrg. 30, (1/2) : 24-32

(Limnological investigations at Centrum Sø, northeast Greenland) De En

Field studies of lake during U.S. Air Force Cambridge Research Laboratory expedition 1960: hydrographic, snow and ice surveys; ablation and thermometric measurements; physical changes during thaw.

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Biol. Glasn., 13 (2/3) : 295-305
 (Biological characteristics of the erosive cataracts of the river Bosna).
 Hr En

BAgr. 25 (11) 87482.

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8-05071
Bull. Jap. Soc. sci. Fish., 27 (11) : 990-5
 Metabolism of radionuclide in fish. 11. Strontium-calcium discrimination
 in gill excretion

Use of gill-perfusion technique to study discrimination rate of strontium
 and calcium in bronchial excretion.

- Hibiya, T. & M. Oguri** (1961) F
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Bull. Jap. Soc. Sci. Fish., 27 (11) : 996-1004
 Gill absorption and tissue distribution of some radionuclides (Cr-51
 Hg-203, Zn-65 and Ag-110 m. 110) in fish

Estimation of absorption rates of these metals and elucidation of patholo-
 gical changes induced by them.

- U.S. Department of Health Education & Welfare** (1962) FG
8-05073
Radiol. Hlth Data, 3 (11) : 425-59

Contains section on water tabulating data for the month of May 1962
 for radioactivity in raw surface waters; also global integrals of fallout, etc.

PLANKTON

- Băcescu, M.** (1961) M
8-05074
Hidrobiol., Bucharest, (3) : 17-46
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Monniot, F. (1962)

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C.R. Acad. Sci., Paris, 255 (20) : 2656-60

8-05170

Présence à Roscoff d'une Ascidiidae interstitielle: *Psammascidia teissieri* n.g., n. sp. (Record in Roscoff of an interstitial Ascidiidae: *Psammascidia teissieri* n.g., n. sp.)

Preliminary note.

Berkaloff, C. (1962)

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C.R. Acad. Sci., Paris, 254 (18) : 3235-7

8-05171

Quelques données sur les ultrastructures de *Furcellaria fastigiata* (Huds.) Lamour (Gigartinales Rhodophycées) (Some acts on the ultrastructures of *Furcellaria fastigiata* (Huds.) Lamour, Gigartineae, Rhodophyceae)

Preliminary note of the plast structure as observed under the electron microscope.

Arvanitaki-Chalazonitis, A. (1962)

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C.R. Acad. Sci., Paris, 255 (13) : 1523-5

8-05172

Plateaux de dépolarisation et trains paroxystiques de pointes en hyperthermie, sur certains neurones identifiables d'*Aplysia* (Depolarization plates and paroxystic movements of hyper-thermic piercing on certain identifiable neurons in *Aplysia*)

Experiments carried out with *Aplysia californica* et *fasciata*.

Bierne, J. (1962)

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C.R. Acad. Sci., Paris, 255 (1) : 185-7

8-05173

La régénération des gonades chez la Némerte *Lineus ruber* Müller (The regeneration of gonads in the Nemertea *Lineus ruber* Müller)

Preliminary note on laboratory experiments.

Vernet-Cornubert, G. (1962)

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C.R. Acad. Sci., Paris, 255 (16) : 2015-7

8-05174

Étude comparée des effets provoqués par la régénération intensive et l'ablation des pédoncules oculaires sur la mue et la croissance de *Pachygrapsus marmoratus* (Fabricius) (Comparative study of the effects produced by the intensive regeneration and the excision of the eyestalks on the molting and growth of *Pachygrapsus marmoratus* (Fabricius))

Preliminary note.

de Sousa e Silva, E. (1959)*

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Notas Estud. Inst. Biol. marit., (21) : 11-2

8-05175

Some observations on marine dinoflagellate cultures. 1. *Prorocentrum micans* Ehr. and *Gyrodinium* sp.

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8-05176

Bergquist, P. R. et al. (1961)**Mem. N.Z. oceanogr. Inst.*, (13) : 169-239

Biological results of the Chatham Islands 1954 expedition. Part 5. Porifera: Demospongiae and Keratosa by Patricia R. Bergquist; Crustacea Isopoda: Bopyridae by Richard B. Pike; Crustacea Isopoda: Serolidae by D. E. Hurley; Hydroida by Patricia M. Ralph

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Savilov, A. (1961?)*

Honolulu, Biological Laboratory, 5 p.

The Siphonophorae *Velella* and *Physalia* in the pleuston of the Pacific.

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Teixeira, C. (1961)*Bol. Inst. oceanogr. S. Paulo*, 11 (4) : 3-13

Diatomáceas dos sedimentos de doze estações oceanográficas na costa brasileira (Diatoms of sediments from 12 oceanographic stations off the Brazilian coast). *Pr En*

Twelve bottom samples from different points of the Brazilian coast, in the region between Lats. 05° 30.5' N—03° 49.45' S; Longs. 50° 28' W—32° 27.2' W are studied. *Stauroneis africana*, *Nitzschia distans*, *Amphora alata* and *Fragilaria hyalina* are recorded for the first time in Brazilian waters.

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Óskarsson, I. (1962)*Náttúrufræðingurinn*, 32 (1) : 31-5

Nýjungar um íslensk lindýr (New findings regarding Icelandic invertebrates). *Is En*

Three new spp. of Mollusca *Chrysallida spiralis*, *Lepidopleurus alveolus* and *Thracia convexa ventricosa* recorded in Iceland. Last-named formerly identified by authors as *Thracia deveva*.

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Hass, H. (1962)*New Scient.*, 16 (311) : 268-70

A new theory of atoll formation

Based on observations in the Maldives. Atoll formation interpreted as coral reefs which have expanded and collapsed in the centre.

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Stoddart, D. R. (1962)*New Scient.*, 16 (312) : 337-8

A new theory of atoll formation

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Mateus, A. & E. Mateus (1962)*Vie et Milieu*, 12 (4) : 595-604

Une nouvelle espèce d'*Hyale* (Amphipode) de la Méditerranée (A new species of *Hyale* (Amphipoda) of the Mediterranean)

Description of *Hyale gulbenkiani*.

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8-05183
- Téttry, A.** (1959)
In 8-05250 : 785-854
Classe des Sipunculien (Class of Sipunculidea de Quatrefages, 1866)
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- Dawydoff, C.** (1959)
In 8-05250 : 855-907
Classe des Echiuriens (Class of Echiurida, De Blainville, Gephyrea Armata de Quatrefages, 1847)
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8-05185
- Dawydoff, C.** (1959)
In 8-05250 : 908-26
Classe des Priapulien (Class of Priapulidea, Delage & Hérouard, 1897, Priapulidae Savigny).
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8-05186
- Brien, P.** (1959)
In 8-05250 : 927-1007
Classe des Endoproctes ou Kamptozoaires (Class of Endoprocta Nitsche 1870, Kamptozoa Cori 1929)
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8-05187
- Grassé, P.-P.** (1959)
In 8-05250 : 1008-53
Classe de Phoronidiens (Class of Phoronidea)
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- Grassé, P.-P.** (1959)
In 8-05250 : MLV-MCXVI
Addenda
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- Dangeard, P.** (1961)
Botaniste, 44 (1/6) : 5-19
Guide pour l'algologue sur la côte basque française (Guide for the algologist on the French Basque coast)
BAgr. 25 (11) 87050.
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BAgr. 25 (11) 87051.

Gayral, P. (1961)M
8-05192*Botaniste*, 44 (1/6) : 229-39

Description, reproduction et développement d'une variété d'*Enteromorpha hendayensis* P. Dangeard et H. Parriaud: *Enterom. hendayensis* var. *salensis* nov. var. (Description, reproduction and development of a variety of *Enteromorpha hendayensis* P. Dangeard and H. Parriaud: *Enteromorpha hendayensis* var. *salensis* nov. var.)

BAgr. 25 (11) 87057.

Gayral, P. (1961)M
8-05193*Botaniste*, 44 (1/6) : 223-8

Sur deux ulvacées de la côte marocaine du détroit de Gibraltar: *Ulva rigida* C. Agar et *Ulva olivacea* P. Dang (On two ulvaceans from the coast of Morocco of the strait of Gibraltar: *Ulva rigida* C. Agar and *Ulva olivacea* P. Dang)

BAgr. 25 (11) 87058.

Matvienko, O. M. (1960)M
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(Ways and trends of evolutional development in Chrysophyta). Uk En

BAgr. 25 (11) 87059.

Parriaud, H. (1961)M
8-05195*Botaniste*, 44 (1/6) : 241-54

Entéromorphes nouvelles du Bassin d'Arcachon (New Enteromorphs from the basin of Arcachon)

BAgr. 25 (11) 87061.

Makarova, I. V. (1961)M
8-05196*Mater. bot. Inst. im. V. L. Komarova (Spor. Rast. Bot.)*, 14 : 45-8

De identificatione speciorum *Chaetoceras rigidus* Ostf. et *Ch. ceratosporus* Ostf. (On the identification of the species *Chaetoceras rigidus* Ostf. and *Ch. ceratosporus* Ostf.). Ru

BAgr. 26 (2) 8278.

Zinova, A. D. (1961)M
8-05197*Mater. bot. Inst. im. V. L. Komarova (Spor. Rast. Bot.)*, 14 : 86-7

Index algarum marinarum ab A. A. Birula apud insulam Spitzbergen inventarum (Index of marine algae collected by A. A. Birula near the island Spitsbergen). Ru

BAgr. 26 (2) 8283.

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Aust. J. Sci., 24 (9) : 389

Attachment of marine invertebrates and algae to polytetrafluorethylene (PTFE) surfaces

Exposure of steel plates coated with PTFE in the sea for 74 days and examination of the fouling, then found, with respect to composition and strength of attachment.

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8-05199**Yamada, N.** (1961)
Bull. Jap. Soc. sci. Fish., 27 (11) : 953-7(Studies on the manure for seaweed. 1. On the change of nitrogenous component of *Gelidium amansii* Lmx. cultured with different nitrogen sources).
Ni EnMeasurement of nitrogen content (total-N and protein-N) of *Gelidium amansii* cultured in seawater to which various concentrations of NH_4NO_3 , NaNO_3 , NaNO_2 and $\text{CO}(\text{NH}_2)_2$ were added.M
8-05200**Watanabe, Y.** (1961)
J. Fac. Sci., Hokkaido, 14 (4) : 511-21

The effects of potassium and calcium ions on the transmission of nerve impulses through the abdominal ganglion of the crayfish

Temporal summation of synaptic responses set up by two afferent volleys; effect of change in C- and K-concentration on height of synaptic potential and, for K, on amplitude of presynaptic volley.

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8-05201**Miura, A.** (1961)
J. Tokyo Univ. Fish., 47 (2) : 305-11A new species of *Porphyra* and its *Conchocelis*-phase in natureDiagnostic description of *Porphyra tenuipedalis* n. sp. and description of its leafy and *Conchocelis*-phases.M
8-05202**Kustanowich, S.** (1962)
N.Z.J. Geol. Geophys., 5 (3) : 427-34

A foraminiferal fauna from Capricorn Seamount, south-west equatorial Pacific

Sixty-six benthic and 21 planktonic species are listed from a sample of globigerina ooze taken at 470 fathoms from a seamount on the eastern flank of the Tonga Trench. The fauna as a whole is typically warm-water modern one.

Fleming, C. A. (1962)

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8-05203

Pacif. Sci., 16 (2) : 181-5

On the Hawaiian scallops of the genus *Pecten* Muller (Pelecypoda)

The right valve of a rare Hawaiian scallop named on the basis of left valves, is described and figured for the first time, and classed as a subspecies of *Pecten jacobaeus* (Linn.). Its place in the biogeographic history of the genus *Pecten* is discussed.

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Banner, A. H. & D. M. Banner (1962)

8-05204

Pacif. Sci., 16 (2) : 238-40

Contributions to the knowledge of the alpheid shrimp of the Pacific Ocean.
8. Losses of specimens in the fire of the Hawaii Marine Laboratory

Ci 61-01460, 61-01459, 60-8813, 59-3901, 581327, 59-2547.

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Kenny, R. & N. Haysom (1962)

8-05205

Pacif. Sci., 16 (3) : 245-63

Ecology of rocky shore organisms at Macquarie Island

Major features of the zonation pattern are described; the secondary organisms associated with the major zones are listed; the zonation pattern is compared with similar ecological situations in Australia, New Zealand, South Africa and South America.

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Winkler, L. R. & B. E. Tilton (1962)

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Pacif. Sci., 16 (3) : 286-90

Predation on the California sea hare, *Aplysia californica* Cooper, by the solitary great green sea anemone, *Anthopleura xanthogrammica* (Brandt), and the effect of sea hare toxin and acetylcholine on anemone muscle

Examination of remains of the *Aplysia* in the enteron of *Anthopleura* with regard to proportion of the body of each *Aplysia* consumed.

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Anderson, D. T. (1962)

8-05207

Proc. Linn. Soc. N.S.W., 87 (1) : 62-8

The reproduction and early life histories of the gastropods *Bembicium auratum* (Quoy and Gaimard) (Fam. Littorinidae), *Cellana tramoserica* (Sower) (Fam. Patellidae) and *Melanerita melanotragus* (Smith) (Fam. Neritidae)

Egg masses, spawning behaviour and illustrated description of larval development of these littoral molluscs.

M

Fell, H. B. (1962)

8-05208

Proc. Linn. Soc. N.S.W., 87 (1) : 79-83

A revised classification of the Australian Amphiuroidae (Ophiuroidea)

Revised checklist of Australian Amphiuroidae, key to the genera and keys to the species *Monamphiura*, *Amphinephthys*, *Amphiura* and *Amphioplus*.

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- Wells, J. W.** (1962)
Rec. Aust. Mus., 25 (11) : 239-41
 Two new scleractinian corals from Australia

Ill. morphological description of *Coscinaraea moneilli* n. sp. and *C. marshae* n. sp.

- M
8-05210
- Wisely, B.** (1962)
Rec. Aust. Mus., 25 (12) : 243-8
 Two spirorbid tubeworms (Serpulidae, Polychaeta) from eastern Australia

Description of *Spirorbis convexis* n. sp. and *S. lamellosa* Lamarck, with regard to tube, setation, branchial operculum and incubation, breeding season, larvae and metamorphosis.

- M
8-05211
- Kawahara, T.** (1960)
Rep. Fac. Fish. Univ. Mie, 3 (3) : 565-71

Analysis of ecological phenomena in the community of sessile organisms.
 1. Extinction of *Bugula neritina* Linné and *Styela plicata* (Lesueur) from the community

Use of a 3-dimensional graph to represent number changes and growth of weight of a colony against time and to demonstrate different types of extinction of the colony; rapid due to environmental change and gradual due to senescence.

- M
8-05212
- Kawahara, T.** (1960)
Rep. Fac. Fish. Univ. Mie, 3 (3) : 573-81

Analysis of ecological phenomena in the community of sessile organisms.
 2. Growth, maturation and propagation in *Bugula neritina* Linné

Use of the method of previous paper for study of changes in a *Bugula* community. Co 8-05211.

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- Kawahara, T. & H. Iizima** (1960)
Rep. Fac. Fish. Univ. Mie, 3 (3) : 582-94

On the constitution of marine fouling communities at various depths in Ago Bay

Vertical distribution of species, constitution of communities, and advanced stage of communities with reference to growth and life form of their members.

- M
8-05214
- Segi, T.** (1960)
Rep. Fac. Fish. Univ. Mie, 3 (3) : 608-26
 Further study of *Polysiphonia* from Japan. (11)

Notes and ill. of 20 spp.

- M
8-05215
- Kawahara, T.** (1961)
Rep. Fac. Fish. Univ. Mie, 4 (1) : 65-80
 Regional differences in the composition of fouling communities in Ago Bay
 Examination of communities established on concrete test blocks immersed for four months; species frequency and community composition.
- M
8-05216
- Greer, D. L.** (1962)
Pacif. Sci., 16 (3) : 280-5
 Studies on the embryology of *Pycnopodia helianthoides* (Brandt) Stimpson
 Examination of number of rays at time of metamorphosis and position of hydrocoel closure.
- M
8-05217
- Jönsson, S.** (1962)
C.R. Acad. Sci., Paris, 255 (16) : 1983-7
 Sur la reproduction de l'*Anadyomene stellata* (Wulf.) Ag. de la Méditerranée
 (On the reproduction of *Anadyomene stellata* (Wulf.) from the Mediterranean Sea)
 In this sp. there exists a direct reproduction by means of quadriflagellate zoospores occurring only in the Mediterranean during the warm season.
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- Ooishi, S.** (1961)
Rep. Fac. Fish. Univ. Mie, 4 (1) : 87-92
 A new notodelphyoid copepod, *Pachypygus curvatus* n. sp., found in Japan
 Ill. account of morphology.
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- Shiino, S. M.** (1961)
Rep. Fac. Fish. Univ. Mie, 4 (1) : 93-8
 Eine neue Art der Gattung *Argathona* (Crustacea, Isopoda: Flabellifera, Corallanidae) aus Japan (A new species of the genus *Argathona*, Crustacea, Isopoda: Flabellifera, Corallanidae, from Japan)
 Ill. account of morphology.
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8-05220
- Ooishi, S.** (1961)
Rep. Fac. Fish. Univ. Mie, 4 (1) : 81-6
 A notodelphyoid copepod, *Pachypygus gibber* (Thorell), newly found in Japan
 Ill. account of morphology.

- Piña Pisa, F. T.** (1962) 8-05221
S. Pacif. Bull., 12 (3) : 24-6
 The rising of the palolo

Popular ill. article on the methods of harvesting and of processing the egg and sperm sacs of the palolo worm with an account of the reasoning on which a prediction is made of the casting of the sacs.

- Powell, A. W. B.** (1961) M
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Tuatara, 9 (1) : 1-8
 New Zealand biotic provinces

Review of previous literature on this matter and discussion of the location of each province and the composition of its fauna.

- Pawson, D. L.** (1961) M
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Tuatara, 9 (1) : 9-18
 Distribution patterns of New Zealand echinoderms

Patterns of distribution of shelf fauna to 100 fathom depths, with some consideration of archibenthal and abyssal faunas.

- Moore, L. B.** (1961) M
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Tuatara, 9 (1) : 18-23
 Distribution patterns in New Zealand seaweeds

Distribution maps for thirty species of seaweeds.

- H.B.F.** (1961) M
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Tuatara, 9 (2) : 84
 A dangerous sea-urchin

Note on *Araeosoma thetidis*.

- Wear, R. G.** (1962) M
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Tuatara, 9 (3) : 116-28
 The lugworm *Abarenicola assimilis* as a laboratory animal

Description of general behaviour and morphology with anatomical drawings.

- Dell, R. K.** (1962) M
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Tuatara, 10 (1) : 43-52
 New Zealand marine provinces—do they exist?

Discussion of checklists of molluscan distribution on which a scheme of marine provinces might be constructed.

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Pacif. Nat., 3 (5) : 233-46

Studies of *Cucumaria curata* Cowles 1907

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Comp. Biochem. Physiol., 5 : 161-76

Circulation in the cephalopod *Octopus dofleini*

IABS 26 (3) 6695.

Phillips, D. C. (1962)

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Spec. sci. Rep. Fla Bd Conserv. Mar. Lab., (6) : 12 p.

Distribution of seagrasses in Tampa Bay, Florida

Survey of seagrass growth areas.

Chapman, V. J. (1961)

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Bull. Res. Coun. Israel, 10D (1/4) : 15-28

New entities and combinations in the Phaeophyceae of New Zealand

BAgr. 26 (1) 213.

Koster, J. T. (1961)

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8-05232

Bull. Res. Coun. Israel, 10D (1/4) : 90-3

On the delineation of species of Cyanophyceae

BAgr. 26 (1) 221.

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Cyanophyceae maritimae novae e Murmano (Marine Cyanophyceae new for Murmansk). Ru

BAgr. 26 (1) 223.

Proshkina-Lavrenko, A. I. (1961)

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Mater. bot. Inst. im. V. L. Komarova (Spor. Rast. Bot.), 14 : 23-32

Species *Chaetoceras* ehr. novae e Mari azoviano (maeotico) (The species *Chaetoceras* Ehr. new to the Azov Sea). Ru

BAgr. 26 (1) 228.

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Mater. bot. Inst. im. V. L. Komarova (Spor. Rast. Bot.), 14 : 94-107
 Algae marinae novae ad oram maritimam regionis primorskiensis (Mare japonicum) inventae (Marine algae so far unknown collected in the Primorskij kraj (Sea of Japan)). *Ru*
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 Species algarum pro Murmano novae (Algae species new for Murman).
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 BAgr. 26 (1) 236.
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Bull. Res. Coun. Israel, 10D (1/4) : 54-8
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 BAgr. 26 (1) 641.
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Mater. bot. Inst. im. V. L. Komarova (Spor. Rast. Bot.), 14 : 33-9
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 BAgr. 26 (1) 227.

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Ann. Mag. nat. Hist., (13), 5 (52) : 193-7

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Deals with the description of a n. sp. of the subgenus *Semibalanus* of the genus *Balanus*.

Rutherford, D. J. (1962)

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Ann. Mag. nat. Hist., (13), 5 (52) : 199-204

A rare hydromedusan, *Staurophora mertensi*, at St. Andrews

Records occurrence of this Arctic sp. and gives ill. description of features.

Clark, A. M. (1962)

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Ann. Mag. nat. Hist. (13), 5 (52) : 243-51

A new genus and species of recent starfishes belonging to the aberrant family Sphaerasteridae, with notes on the possible origin and affinities of the family

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Millar, R. H. (1962)

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Ann. Mag. nat. Hist., (13), 5 (54) : 337-40

Budding in the ascidian *Aplidium petrense* Michaelsen

Observations show that buds are formed from the abdomen and postabdomen instead of from the post-abdomen alone as in most polyclinid ascidians.

Griffith, G. W. & M. Castagna (1962)

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Chesapeake Sci., 3 (3) : 215-6

Sexual dimorphism in oyster drills of Chincoteague Bay, Maryland-Virginia

Reports results of quantitative study of the differences in maximum height of male and female *Urosalpinx cinerea follyensis* and *Eupleura caudata etterae*.

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Rev. gen. Bot., 78 (806) : 443-56

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BAgr. 25 (11) 87046.

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Botaniste, 14 (1/6) : 209-22

Sur une chaetophoracée observée dans des cultures de diverses ulvacées provenant de régions saumâtres: *Ulvella protuberans* nov. sp. (On a chaetophorean observed in different ulvacean cultures from brackish waters: *Ulvella protuberans* nov. sp.)

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BAgr. 25 (11) 87053.

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Ceylon J. Sci., 4 (1) : 1-40

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Vie et Milieu, 12 (4) : 605-14

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En 1950, Bogoslovskii, A. S. Available from the Office of Technical Services, Washington, D.C.

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Anal. știint. Univ. Iași (Științe nat.), 6 (1) : 9-18

Contributions à l'étude du processus hémostatique chez l'*Astacus fluviatilis* (Contribution to the study of the hemostatic process of *Astacus fluviatilis*). Ro Ru

Hușanu, O. (1960)F
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Anal. știint. Univ. Iași (Științe nat.), 6 (1) : 134-8

Contribuțiuni la cunoașterea gasteropodelor din Moldova (Contribution to the knowledge of gastropods of Moldavia). Ro Ru Fr

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Anal. știint. Univ. Iași (Științe nat.), 6 (2) : 295-300

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nalis Kröyer)

Two spp. of parasitic isopod Crustacea from Firth of Clyde and northern
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Characteristics and utilization of deep water and floating trawls.
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Comparison of fishing efficiency of a hook weighted with lead against normal hook in fishing for tuna under various sea conditions.

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Quantitative and qualitative study of the food of the spp., variations on seasonal feeding, notes on spawning seasons.

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- Symposium on Scombroid Fishes held under the auspices of the Marine Biological Association of India, Mandapam Camp, January 12-15, 1962** (1962)
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In 8-05335

A systematic review of the scombroid fishes of India

A review of the mackerels, tuna and tuna-like fishes; Spanish mackerel or seerfishes; and bill fishes occurring in Indian seas is given. Meristic and morphometric details for the spp. and wherever necessary nomenclatorial discussions on the spp. are also included. A key for the identification of the different spp. is presented.

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In 8-05335

Scombroid fishes of the western Indian Ocean and of South Africa

Enumerates the spp. of Xiphiidae, Istiophoridae, Scomberomoridae and Scombridae, and discusses their habits, ecology, taxonomy and economic value.

de Boucherville Baissac, J. (1962)M
8-05338

In 8-05335

Scombroid fishes of Mascarene waters

The scombroid fishes occurring in the waters around Reunion, Mauritius and Rodrigues Islands, are listed. They belong to the genera *Thunnus*, (*Neothunnus*), *Gymnosarda*, *Euthynnus*, *Katsuwonus*, *Rastrelliger*, *Scomberomorus*, *Acanthocybium*, *Istiophorus* and *Makaira*. A brief account is given on the extent of the fishery of a new sp. Their local names, the gear used for capture, the average weight of the spp. caught, and the method of disposal of the catches are also given.

Whitley, G. P. (1962)M
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In 8-05335

Scombroid fishes of Australia and New Zealand

A synopsis of tunas, billfishes, mackerel, and seerfishes briefly outlining their synonymy, key characters, sizes and known distribution. There are 25 genera concerned.

Blanc, M. & M. L. Bauchot (1962)M
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In 8-05335

The scombroidei of the Museum of Natural History, Paris

29 types of spp. (53 specimens). To those types are added: 57 historical exemplaries and 9 new spp.

AQUATIC STOCKS

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In 8-05335
 Scombroid fishes in the Museum of Comparative Zoology, Harvard University

The scombroid fishes are listed, with additional data on numbers available for examination, and localities of their occurrence.

- Jones, S. & E. G. Silas** (1962) M
8-05342
In 8-05335
 Mackerel from the Andaman Sea

The spp. are indicated. Nomenclatorial discussions on *R. kanagurta*, *R. brachysoma*, and *R. neglectus* are included along with morphometric and meristic details.

- Rivas, L. R.** (1962) M
8-05343
In 8-05335
 Key to the Atlantic Ocean tuna fishes of the genus *Thunnus*

The sub-genera are characterized mainly on the basis of internal characters. The geographical distribution and the most widely used names are given for each sp. following the diagnostic key characters.

- Silas, E. G.** (1962) M
8-05344
In 8-05335
 Aspects of the taxonomy and biology of the oriental bonito, *Sarda orientalis* (Temminck and Schlegel)

A taxonomic discussion on the sp. is presented along with a redescription of the sp. based on material from Indian waters. Comparisons are also drawn with available data on typical material from Japanese waters. Some observations are made on the fecundity and spawning periodicity of the sp.

- Silas, E. G.** (1962) M
8-05345
In 8-05335
Cybiium croockewiti Bleeker (1850) and *Cybiium koreanum* Kishinouye (1915) considered synonyms of *Scomberomorus guttatus* (Block and Schneider), with a redescription, species synopsis, and annotated bibliography of *S. guttatus*

- Balakrishnan, V.** (1962) M
8-05346
In 8-05335
 Studies on the fin ray counts in the median fins of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier)

The variability in the number of rays of the dorsal and anal fins has been studied by adopting the clearing and straining technique.

Gnanamuttu, J. C. & G. Seshappa (1962)M
8-05347

In 8-05335

On the osteology of *Rastrelliger kanagurta* (Cuvier)

A detailed study of the different bones of the skeleton.

Jones, S. & M. Kumaran (1962)M
8-05348

In 8-05335

Larvae and juveniles of Indian scombroid fishes

The available information on the larvae and juveniles of the scombroid fishes known to occur in the Indian Ocean is briefly reviewed and the typical stages are described and figured. An arbitrary key to the identification of the larvae is also provided.

Ueyanagi, S. (1962)M
8-05349

In 8-05335

Description and distribution of larvae of five istiophorid species in the Indo-Pacific

Shortnosed spearfish (*Tetrapturus angustirostris*), sailfish *Istiophorus orientalis*, striped marlin (*Makaira mitsukurii*), black marlin (*Eumakaira nigra*), white marlin (*Martina martina*) are described and diagnostic characters are given to aid in the identification of the spp. The geographical and seasonal distribution of larvae are described.

Rao, K. V. (1962)M
8-05350

In 8-05335

The distribution of juvenile stages of the mackerel, *Rastrelliger kanagurta* (Cuvier) in the Indian inshore waters**Suda, A. & T. Shiohama** (1962)M
8-05351

In 8-05335

Studies on the albacore—7. Some considerations on the relationship between the distribution of albacore and the surface water temperature in the long-line fishing ground of the North West Pacific

Attempts to evaluate the availability of fish shoals, the possibility of forecast of some kind of fishing condition, and to estimate more effectively the amount of catch, hooked-rate, size of year, etc.

Jones, S. & M. Kumaran (1962)M
8-05352

In 8-05335

A preliminary study of the distribution of the larval billfishes (Xiphiidae and Istiophoridae), in the Indo-Pacific with special reference to collections made by the Danish Dana Expedition

The spp. dealt with are *Xiphias gladius* Linnaeus, *Tetrapturus angustirostris* (Tanaka), *Istiompax indicus*, *Makaira audax*, *M. mazara* and *Istiophorus gladius*. Charts showing larvae distribution in the Indo-Pacific are given.

M
8-05353

Tsuruta, S. (1962)
In 8-05335

Morphometric characters of yellowfin tuna *Germo macropterus* (Temminck and Schlegel), from south western waters of the Indian Ocean off Madagascar

Comparisons are drawn of body proportions of yellowfin tuna from the area investigated with samples from Costa Rica, Hawaii, S.W. Pacific, southwestern waters of the Greater Sunda Islands, Mid-Indian Ocean, S.E. Arabian Sea, and Angola.

M
8-05354

George, P. C. (1962)
In 8-05335

Our current knowledge on the nutrition of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier) with suggestions for an effective study of the ecology of feeding in plankton feeding fishes

All the available information on the food and feeding relations of *Rastrelliger kanagurta* in the Indo-Pacific area is drawn up to get a clear picture of our present knowledge on the ecology of feeding of the sp. The 'number method' of analysis cross-checked with 'points method' is recommended, for examining gut contents and the food elements available in the environment.

M
8-05355

Noble, A. (1962)
In 8-05335

Food and feeding habits of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier) at Karwar

M
8-05356

Rao, K. V. N. (1962)
In 8-05335

Observations on the bionomics of the Indian mackerel, *Rastrelliger kanagurta* (C.), caught in the Lawson's Bay, near Waltair, Andhra coast

Investigation based on 539 specimens of the Indian mackerel, *R. kanagurta* (C.), ranging in length from 32 to 243 mm. It includes several aspects of its bionomics.

M
8-05357

Rao, K. V. N. (1962)
In 8-05335

Food of the Indian mackerel, *Rastrelliger kanagurta* (C.), taken by drift nets in the Arabian Sea off Vizhingam, South Kerala

M
8-05358

Rao, V. R. (1962)
In 8-05335

Studies on the food and feeding habits of the mackerel *Rastrelliger kanagurta* (Cuvier) in the Mangalore zone

Kumaran, M. (1962)

M

8-05359

In 8-05335

Observations on the food of juveniles of *Scomberomorus commerson* (Lacépède) and *S. guttatus* (Bloch and Schneider) of the South Kerala coast

Post-larvae and juveniles of small fishes and crustaceans are the most favourite food items and there is some similarity in the food preferences of both spp.

Rao, K. S. (1962)

M

8-05360

In 8-05335

Observations on the food and feeding habits of *Scomberomorus guttatus* (Bl. Schn.) and of the juveniles of *S. commerson* (Lac.) of the Waltair coast

The food was found to be mainly composed of teleosts (70.0%) and crustaceans (24.6%) besides a few cephalopods and gastropods. The important teleostean items were *Anchoviella* spp. (12.0%), *Trichiurus* spp. (6.0%) and *Sardinella* spp. (5.0%), although *Caranx* spp., *Acanthurus* spp., percoids, and *Leiognathus* spp. etc. were also met with occasionally. The crustaceans were represented by alima larvae (20.0%) and *Acetes* sp. (3.5%). Juveniles of *S. guttatus* and *S. commersonii* were also observed to be feeding mainly on teleosts, namely *Anchoviella* spp. and *Sardinella* spp.

Kumaran, M. (1962)

M

8-05361

In 8-05335

Studies on the food of juveniles and adults of *Euthynnus affinis affinis* (Cantor), *Auxis thynnoides* Bleeker and *Sarda orientalis* (Temminck and Schlegel)

The results obtained by the analysis of the stomach contents of juveniles and adults collected from the inshore areas of Vizhingham, Tuticorin and Cape Comorin are presented.

Raju, G. (1962)

M

8-05362

In 8-05335

Observations on the food and feeding habits of the oceanic skipjack *Katsuwonus pelamis* (Linn.) from Minicoy

The stomach contents of 2506 skipjacks sampled at random from the landings of pole and line fishing with live-bait are analysed by the general systems of analysis, viz., volumetric, numerical and occurrence.

Thomas, P. T. (1962)

M

8-05363

In 8-05335

The food and feeding habits of *Katsuwonus pelamis* (Linnaeus) with observations on the food of *Neothunnus macropterus* (Temminck and Schlegel) from Minicoy waters for the season 1960/1961

A brief study of the food and feeding habits of *Katsuwonus pelamis* by the examination of gut contents of specimens obtained from the catches in Minicoy during the period Nov. 1960-Apr. 1961. A qualitative analysis is made to determine the various items of the food. The volume of each food item in each stomach is determined. Some observations on the food of *Neothunnus macropterus* from the same locality for the same period, are also recorded.

- Silas, E. G.** (1962) M
8-05364
In 8-05335

Morphometric comparison and preliminary observations on the food and maturity of yellowfin tuna, *Neothunnus macropterus* (Temminck & Schlegel) caught in Indian waters

- Watanabe, H.** (1962) M
8-05365
In 8-05335

Frigate mackerel (genus *Auxis*) from the stomach contents of tuna and marlins

Some 1,300 frigate mackerel were found in stomachs of longline-caught tunas and marlins during the period from 1949 to 1958, inclusive.

- Jones, S.** (1962) M
8-05366
In 8-05335

A preliminary survey of the tuna baitfishes of Minicoy and their distribution in the Laccadive Archipelago

Over 40 spp. are listed and figured and information about them is given in a general way with their distribution in and around other islands of the Laccadive Archipelago. An arbitrary key for their identification is also furnished.

- Thomas, P. T.** (1962) M
8-05367
In 8-05335

A study of the fluctuations in the occurrence of the major tuna live-bait fishes of Minicoy

Lepidozygus tapeinosoma, *Caesio caerulaureus*, *Archamia lineolatus*, *Apogon sangiensis* and *Caesio chrysozoma* dominate. The size composition of *L. tapeinosoma*, *A. lineolatus* and *C. caerulaureus* for the period is given.

- Raju, G.** (1962) M
8-05368
In 8-05335

A study of the sexual maturity and spawning of *Lepidozygous tapeinosoma* Gunther—A principal live-bait of tuna at Minicoy

- Bell, R. R.** (1961) M
8-05369
In 8-05335

A history of tuna age determination

Reports the history of age determination for commercially important tunas. Tables of age and equivalent lengths or weights are presented for comparative purposes whenever the contents of the historical sources permit. Methods are described in several of the reviewed papers and are included where possible.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Bas, C. (1962) M
8-05370
In 8-05335

Development and growth in certain Scombridae of the Spanish coast

Research on *Scomber scombrus* and *S. colias*.

Seshappa, G. (1962) M
8-05371
In 8-05335

On the problem of age-indicators in the scombroid fishes with special reference to *Rastrelliger kanagurta* (Cuvier)

George, K. C. (1962) M
8-05372
In 8-05335

Age and growth studies on the Indian mackerel *Rastrelliger kanagurta* (Cuvier) by the length frequency method

Balakrishnan, V. (1962) M
8-05373
In 8-05335

Spawning, rate of growth and age groups of *Rastrelliger kanagurta* (Cuvier) as observed at Vizhingam during 1955-1957

Radhakrishnan, N. (1962) M
8-05374
In 8-05335

Observations on the maturity and spawning of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier) at Karwar

Bennet, P. S. (1962) M
8-05375
In 8-05335

The mackerel tuna *Euthynnus affinis affinis* (Cantor), in the Vizhingam fisheries

Estimated monthly landings of mackerel tuna, monthly landings of other spp. of tuna and their percentage in the total catch are presented in a tabulated statement. The position of the tuna fishery in the overall fishing industry at Vizhingam, based on the available statistics on fish catch, is discussed.

Tsotomu, K. & K. Kodama (1962) M
8-05376
In 8-05335

Some considerations on the growth of marlins, using size frequencies in commercial catches. 2. Attempts to estimate the growth of the so-called white marlin, *Marlina marlina*

Two methods are used for age determination of marlins. The first method is to assume the boundary of each age group in the length frequency distribution. The second method is to trace the modal points derived from length frequencies in commercial catches. An estimation of the growth of the so-called white marlin is made by these methods.

M
8-05377

Jones, S. (1962)
In 8-05335

The phenomenal fish mortality in the Arabian Sea in 1957—A speculation of the possible identity of the species concerned

The possibility that juvenile tunas could have been the subject of the catastrophe, at least partly, is pointed out. Reports relating to fish mortalities during the same year from other sources are also recorded.

M
8-05378

Thomas, P. T. & G. Raju (1962)
In 8-05335

Gonadial abnormalities in scombroid fishes

The gonadial abnormalities so far recorded are reviewed.

M
8-05379

Vijayaraghavan, P. (1962)
In 8-05335

Some observations on the spawning behaviour of mackerel

M
8-05380

Raju, G. (1962)
In 8-05335

Fecundity of the oceanic skipjack (*Katsuwonus pelamis* Linnaeus) of Minicoy

Fecundity length regression lines based on four different formulae and fecundity weight regression lines based on two different formulae are compared and discussed.

M
8-05381

Rao, K. V. N. (1962)
In 8-05335

An account of the ripe ovaries of some Indian tunas

Study based on several ripe ovaries of little eastern tunny *Euthynnus affinis*, frigate mackerel *Auxis thazard*, and oriental bonito *Sarda orientalis*, sampled from the drift net catches landed at Vizhingam (Lat. 08° 22' N, Long. 76° 59' E). Description and measurements of their ripe ovaries, ripe ova, together with an account based on a few ripe residual ova collected from a recently spent individual of the Indian long-tailed tunny, *Kishinoella tonggol*, are given.

M
8-05382

Raju, G. (1962)
In 8-05335

Spawning of the oceanic skipjack *Katsuwonus pelamis* (Linnaeus) in Minicoy waters

Eight arbitrary stages of maturity based on the mode of most mature groups of ova, which traces the development of the ova from the immature or resting stage through spawning stage are defined. Gonad index to determine rapidly and objectively the state of maturity of the gonad from weight and length is investigated.

- Clemens, H. B. & P. M. Roedel** (1962) M
8-05383
In 8-05335
 Tagging experiments on mackerel and tuna in the eastern Pacific
 Study of populations of Pacific mackerel (*Pneumatophorus diego*), skipjack (*Katsuwonus pelamis*), Pacific yellowfin tuna (*Neothunnus macropterus*), Pacific albacore (*Thunnus germon*), and California bluefin tuna (*Thunnus saliens*) in the eastern Pacific using the tag-and-recapture technique.
- Nakagome, J.** (1962) M
8-05384
In 8-05335
 Swimming layer of tuna in Indian Ocean
 Study of the seasonal variations in the swimming layer of tunas and marlins, and results obtained on yellowfin tuna and big-eyed tuna in the sub-area Lat. 5° N to 30° S.
- Silas, E. G.** (1962) M
8-05385
In 8-05335
 Behaviour of different species of tunas as noticed from long-line catches, with a résumé of our knowledge on tuna behaviour
 The available information about tuna behaviour is summarized.
- Prasad, R. R. & P. V. R. Nair** (1962) M
8-05386
In 8-05335
 Preliminary observations on the productivity of certain tuna waters off the west coast of India
 The results of the ¹⁴C experiments as well as similar data collected by the 'Galathea' and 'Vityaz' expeditions, are discussed.
- Silas, E. G. & A. N. P. Ummerkutty** (1962) M
8-05387
In 8-05335
 On parasites from Indian scombroid fishes
 Part 1 deals with the copepod parasites collected from Indian scombroids, *Sarda orientalis*, *Auxis* spp., *Neothunnus macropterus*, *Gymnosarda unicolor*, *Grammatorcynus bicarinatus*, *Scomberomorus* spp., *Istiophorus gladius*, *Makaira* spp., etc. Part 2 deals with the helminth parasites collected from these fishes; copepod and helminth parasites described from these fishes earlier from Indian waters as well as extra-Indian waters have been included.
- Jones, S.** (1962) M
8-05388
In 8-05335
 The scombroid fishery of India—present and future
 The fishery constituted by scombroid fishes in India is briefly outlined and its future potentialities, especially in view of the possibilities of further development of the tuna fishery, are indicated.

- Chacko, P. I., S. D. Thomas & C. M. Pillai** (1962) M
8-05389
In 8-05335
Scombroid fishery of Madras State, India

Important spp. are *Rastrelliger kanagurta*, *Euthynnus affinis*, *Neothunnus macropterus*, *Kishinoella tonggol*, *Katsuwonus pelamis*, *Cybbium commersoni*, *Indocybbium guttatum*, *Indocybbium lineolatum* and *Xiphias gladius*. Fishing grounds off Kanyakumari, gulf of Mannar, Palk Bay and Coromandel coast and the gear used are described. A national programme of exploratory fishing, charting of fishing grounds, introduction of new types of capture methods and oceanographic and biological surveys is outlined.

- Pathansali, D.** (1962) M
8-05390
In 8-05335
A note on the scombroid fishery in Malaya

The importance of the inshore scombroid fishery, the main spp. landed, their occurrence and seasonal variation along the coastal waters of Malaya, and the gears employed in the fishery with the percentage capture by each gear, are outlined briefly.

- Bas, C.** (1962) M
8-05391
In 8-05335
Fisheries of scombroids of the Spanish Mediterreanan

Mackerel *Scomber scombrus*; bluefin tuna *Thunnus thynnus*; bonito *Pelamys sarda* and the frigate mackerel *Auxis thazard* are exploited. Small quantities of albacore *Germo alalunga* are present sometimes. The landings are different according to spp. and years.

- Kutty, M. N.** (1962) M
8-05392
In 8-05335
Observations on the Indian mackerel, *Rastrelliger kanagurta* (Cuvier) from the trawl catches along the Bombay coast

- Rao, P. V.** (1962) M
8-05393
In 8-05335
Line fishery for *Rastrelliger kanagurta* (Cuvier), along the North Kanara coast

- Sekharan, K. V.** (1962) M
8-05394
In 8-05335
On the mackerel fishery of the Mandapam area during the years 1952-1956

- Rao, V. R., K. V. Sekharan & M. J. Pradhan** (1962) M
8-05395
In 8-05335
On the mackerel fishery of the Mangalore area during the period 1957-1961

Silas, E. G. (1962)M
8-05396

In 8-05335

Bioluminescence and mackerel fishery

The desirability of exploring possibilities of using purse seines for fishing mackerel at night in Indian waters is indicated.

Jones, S. (1962)M
8-05397

In 8-05335

The mackerel fishery of Pangkor, Malaya

Information on the mackerel fishing industry of Pangkor is given. Suggestions for improving the mackerel fishery industry in India by adopting some of the methods followed in Pangkor are given.

Silas, E. G. (1962)M
8-05398

In 8-05335

Tuna fishery of the Tinnevely coast, gulf of Mannar

Data presented on this fishery includes first-hand observations made by the author on trolling in the actual fishing grounds, the spp. and size compositions in the catch, the mode of disposal of the catch, the price structure prevalent, etc. The spp. caught are *Euthynnus affinis affinis*, *Kishinoella tonggol*, *Auxis thazard*, and *Neothunnus macropterus*. Rarely *Katsuwonus pelamis* is also taken.

Maeda, H. (1962)M
8-05399

In 8-05335

Distribution pattern of fish in relation to fishing method, with special reference to that of tuna along longline

Discusses the relation of fishing method to the distribution pattern which also has some close relation to the position in the food-pyramid with a general view of several common scombroids—from small fish such as anchovy to large ones such as marlin.

De Moraes, M. N. (1962)M
8-05400

In 8-05335

Development of the tuna fishery of Brazil, and preliminary analysis of the first three years' data

Since 1957 logs from each vessel fishing have been available, containing information about the date of each fishing trip, the location, the number of hooks used, and the water temperature. The principal ports of disembarking are Recife and Santos, while the regions that they fish are included between the latitudes of 13° N and 30° S, and the longitudes of 2° E and 52° W. Within this area the fishery is concentrated north of 15° S and west of 25° W. The most important contributors to the catches are: *Germo alalunga*, *Neothunnus albacares*, *Parathunnus obesus*, *Istiophorus americanus*, *Xiphias gladius* and *Makaira amplia*.

AQUATIC STOCKS

Silas, E. G. & M. S. Rajagopal (1962) M
8-05401
In 8-05335

On the sailfish, and marlins of the Tinnevely coast, gulf of Mannar

Besides the sailfish *Istiophorus gladius*, 3 spp. of marlins have been examined from troll line catches made off Tuticorin. The size composition, food, and maturity of the specimens examined are given along with morphometric data on the specimens.

Balakrishnan, V. (1962) M
8-05402
In 8-05335

Size composition of *Rastrelliger kanagurta* (Cuvier) occurring at Vizhingam

Pradhan, L. B. & C. V. G. Reddy (1962) M
8-05403
In 8-05335

Fluctuations in mackerel landings at Calicut in relation to hydrographical factors

Radhakrishnan, N. (1962) M
8-05404
In 8-05335

Catch analysis of mackerel at Karwar and the nearby centres during the seasons 1956-57, 1957-58, and 1958-59

Raju, G. (1962) M
8-05405
In 8-05335

An analysis of the catch statistics of the Minicoy tuna fishery

Thomas, P. T. (1962) M
8-05406
In 8-05335

Size composition of the yellowfin tuna *Neothunnus macropterus* (Temminck and Schlegel) and the oceanic skipjack *Katsuwonus pelamis* (Linnaeus) from the Laccadive Sea around Minicoy

Length frequencies and the relationship between length and weight of the yellowfin tuna, *Neothunnus macropterus*, and the oceanic skipjack *Katsuwonus pelamis* from the catches in Minicoy during the period Nov. 1960-Apr. 1961 are studied. Statistics of the total catch of each sp. during the period, the amount of effort expended and the resultant catch-per-unit of effort are worked out.

Jones, S. & H. Rosa, Jr. (1962) M
8-05407
In 8-05335

A synopsis of data on the genus *Rastrelliger* Jordan and Starks 1908 with an annotated bibliography

A synopsis enlarging and bringing up to date the one presented by H. R. Jr. at the meeting of the sub-committee on *Rastrelliger* of the Indo-Pacific Fisheries Council held in Malaya in Sep. 1956, is given with an annotated bibliography covering over 200 references.

Schaefer, M. B. (1962)M
8-05408

In 8-05335

Some new trends in investigation of tunas in the Pacific Ocean

A brief history of the research on tunas carried out in the past has been given and lines of study on tunas of the Pacific currently being pursued by research workers discussed.

Miyamoto, H. (1962)M
8-05409

In 8-05335

Summary of studies on tuna resources carried out at Nankai Fisheries Research Laboratory, Japan

An outline of the studies on tuna resources conducted by the laboratory is given along with its programme of work.

Jones, S. (1962)M
8-05410

In 8-05335

Conservation of the tuna and billfish resources of the Indian Ocean

Progressive reduction in size of certain spp. in some of the regularly fished areas is reported. The need for initiating co-ordinated action even before the maximum level of fishing is reached, is pointed out.

Boeseman, M. (1962)M
8-05411

In 8-05335

Scombroid types in the Leiden Museum collection

The type specimens available are listed, mentioning the holotypes, syntypes, lectotypes, paratypes and neotypes. Type localities and brief descriptions of the specimens are given along with photographs of the types.

Morrow, J. E. (1962)M
8-05412

In 8-05335

Marlins, sailfish and spearfish of the Indian Ocean

A review is given. *Istiompax indicus*, *Makaira nigricans*, *Tetrapturus audax*, *Istiophorus gladius* and probably *Tetrapturus angustirostris* occur in the Indian Ocean. The distinguishing characters, size, feeding habits, range of distribution, migrations, spawning seasons and fecundity of all the spp. are described and a key to the identification of adult Istiophoridae of the Indian Ocean is also presented. The phylogenetic relationships of the spp. described are indicated diagrammatically.

Deraniyagala, P. E. P. (1962)M
8-05413

In 62-05335

The large beaked scombroids of Ceylon

A brief review of the billfishes of Ceylon waters is given. The spp. are *Tetrapturus indicus*, *T. tenuirostratus*, *Makaira nigricans*, *M. xantholineata*, *M. mitsukurii*, *Istiophorus gladius*, and *Xiphias gladius*.

M

Postel, E. (1962)

8-05414

In 8-05335

Les thonides d'Afrique du Nord (Tunas of North Africa)

A review is given. The spp. dealt with are *Thunnus thynnus*, *Auxis thazard*, *Sarda sarda*, *Euthynnus alletteratus*, *Germo alalunga* and *Orcynopsis unicolor* and available details on their geographical distribution, migrations, anatomy, development, and catch statistics are also included.

M

Banerji, S. K. (1962)

8-05415

In 8-05335

Some considerations in the study of pelagic fish stocks with special reference to Indian mackerel

The limitations in respect of the vital rates from the statistics of commercial catch of pelagic fisheries are discussed.

M

Jonklaas, R. (1962)

8-05416

In 8-05335

Scombroid fishes and fisheries of the Maldiv Islands with special reference to the tuna fishery

Auxis thazard, *Katsuwonus pelamis*, *Euthynnus affinis*, *Neothunnus macropterus*, *Gymnosarda nuda*, *Acanthocybium solandri*, *Makaira indica* and *Histiophorus gladius* were observed by the author enabling drawing up of short accounts of the habitat of these fishes as well as their relative importance in the fishing industry of Maldives.

M

Mimura, K. (1962)

8-05417

In 8-05335

Present status of the tuna longline fishing in Indian Ocean

The present status of the Japanese tuna longline fishing in Indian Ocean is discussed based on the data for 1959.

M

Aslanova, N. E. (1961)

8-05418

Hidrobiol., Bucharest, (3) : 115-32

Mechenie promyslovykh ryb s tsel'iu izucheniia ikh migratsii i drugikh storon biologii (Tagging of fishes for the study of their migration and other biological factors). Ro

M

Maigorova, A. A. (1961)

8-05419

Hidrobiol., Bucharest, (3) : 213-24

Kolebaniia chislennosti osnovnykh promyslovykh ryb Chernogo moria (The fluctuations of the quantity of the basic spp. of fish in the Black Sea). Ro

M

Zusser, S. G. (1961)

8-05420

Hidrobiol., Bucharest, (3) : 377-89

Izuchenie prichin sutochnykh vertikal'nykh migratsii planktonoiadnykh chernomorskikh ryb (Study of the causes of vertical migration of plankton feeding fishes of the Black Sea). Ro

M

Film (1962)

8-05421

Alaska Department of Fish and Game—Subport Building, Juneau, Alaska
The sea lion

16 mm, colour, sound, 20 min.

M

Bjerknes, J. (1961)

8-05422

Bol. Comp. adm. Guano, 37 (9) : 8-13

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Co 62-05148.

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Weather services for small craft

Description of Australian weather forecasting services of value to in-shore fishermen.

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2nd training course for field officers

Syllabus of school given for fishery inspectors and other fishery field officers.

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Discussion of the importance of weather services for fishermen.

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A bibliography of the freshwater fishes of New Zealand

Hunt, R. L., O. M. Brynildson & T. McFadden (1962)* F
Wis. Conserv. Bull., (26) : 58 p. 8-05574

Effects of angling regulations on a wild brook trout fishery

Bennett, G. W. (1962) F
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 Management of artificial lakes and ponds

A general reference for fishery biologists and recreation experts. Covers: History of fish management; artificial aquatic habitats (farm ponds, reservoirs etc.); interrelationships of fishes and lake habitats; carrying capacity, productivity and growth; reproduction, competition and predation; theory and techniques of management; fishing and natural mortality; fish behaviour and angling; commercial aspects of sport fishing.

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Configuration of alginic acid in marine brown algae

- Lavine, L. S. & H. D. Isenberg** (1962) M
8-06198
Nature, Lond., 196 (4849) : 78
Intracellular calcification in a coccolithophorid

Hymenomonas sp., a euryhaline coccolithophorid chrysomonad, was raised axenically in a chemically defined medium containing lactic acid, modified by raising the concentration of magnesium, calcium, phosphate and adding carbonate and 10 mg per cent ethylenediamine tetraacetic acid.

- Gabbut, P. D.** (1962) M
8-06199
Nature, Lond., 196 (4849) : 87-8
'Nests' of the marine false-scorpion

During period 9-15 Apr. 1962, large numbers of *Neobisium maritimum* (Leach) collected at two places in the Isle of Man.

- Bang, F. B.** (1962) M
8-06200
Nature, Lond., 196 (4849) : 88
Serological aspects of immunity in invertebrates

During the summer 1961 at Station Biologique de Roscoff, examined responses of marine worm, *Sipunculus nudus*, and spider crab, *Maia squinado*, to a marine protozoan parasite, *Anophyrus sarcophaga*. This ciliate is a natural parasite of the shore crab, *Carcinus*, reaches high density in the host blood, and eats the amoebocytes.

- Kay, E. A.** (1962) M
8-06201
Nature, Lond., 195 (4836) : 96-7
 A bivalved gastropod from the Hawaiian Islands
- Records the first living specimen of *Caulerpa racemosa* var. *turbinata* (J. Ag.) Eubank of the sub-family Bertheliminiae to be described from a Pacific island.
- Brown, A. C. & L. G. W. Turner** (1962) M
8-06202
Nature, Lond., 195 (4836) : 98-9
 Expansion of the foot in *Bullia* (Gastropoda)
- Studies the mechanism of foot expansion in *Bullia digitalis* from southern Africa.
- Nizamuddin, M.** (1962) M
8-06203
Bot. mar., 4 (3/4) : 191-203
 Classification and the distribution of the Fucales. Fr De
- Gives identification key to the families ; establishes and describes Seirococcaceae fam. nov., Phyllosporideae Schmidt and Seirococcoideae sub-fam. nov. Systematic position of different genera and their distribution are described.
- Glendenning, K. A.** (1962) M
8-06204
Bot. Mar., 4 (3/4) : 204-18
 Determination of fresh weight, solids, ash and equilibrium moisture in *Macrocystis pyrifera*. De
- Huvé, H.** (1962) M
8-06205
Bot. Mar., 4 (3/4) : 219-40
 Taxonomie, écologie et distribution d'une Mélobésiée méditerranéenne: *Lithophyllum papillosum* (Zanardini) comb. nov., non *Lithophyllum* (*Dermatolithon*) *papillosum* (Zanard.) Foslie (Taxonomy, ecology and distribution of a Mediterranean Melobesiace: *Lithophyllum papillosum* (Zanardini) comb. nov., non *Lithophyllum* (*Dermatolithon*) *papillosum* (Zanard.) Foslie). De
- Biebl, E.** (1962) M
8-06206
Bot. mar., 4 (3/4) : 241-60
 Temperaturresistenz tropischer Meeresalgen (Verglichen mit jener von Algen in temperierten Meeresgebieten) Resistance to temperature of tropical marine algae—in comparison with the resistance of algae in temperate marine regions). Fr
- Ci 1937 & 1938, Biebl, R. Examines marine algae for heat and cold resistance.

- Boaden, P. J. S.** (1962) M
8-06207
Cah. Biol. mar., 3 : 245-8
 Colonization of graded sand by an interstitial fauna

Results of an experiment on the colonization of sand samples graded according to particle size on the coast of North Wales.

- Gidholm, L.** (1962) M
8-06208
Cah. Biol. mar., 3 : 249-60

Sur quelques polychètes syllidiens des sables de la région de Roscoff avec description de deux nouvelles espèces (Some syllid polychaetes of the sand of the Roscoff region. Description of two new species). En Ru

Describes two new spp. of syllids and comments upon two which are not previously recorded from the Channel area: *Eurysyllis brevipes* (Hartmann-Schröder), described from the Mediterranean under the new generic name of *Plakosyllis*, which is reported as a synonym; *Dioplosyllis cirrosa* n. gen., n. sp., *Brania swedmarki* n. sp., *Sphaerosyllis tetralix*. Follows a list of other syllids from a locality with Amphioxus-sand.

- Platel, R.** (1962) M
8-06209
Cah. Biol. mar., 3 : 261-88

Histologie du tube digestif de *Myzostomum cirriferum* (Leuckart) (Myzostomides) (Histology of the alimentary canal of *Myzostomum cirriferum* (Leuckart), Myzostomides). En Ru

Histological, cytological and histochemical study of the alimentary canal and accurate description of this organ; defines the specific nature of the salivary glands and studies the real basic structure of the stomachal epithelium, defining its two most important flat and upper aspects, together with a mixed one, those three aspects reflecting the inward process of assimilation.

- Lévi, C. & A. Porte** (1962) M
8-06210
Cah. Biol. mar., 3 : 307-15

Étude au microscope électronique de l'éponge *Oscarella lobularis* Schmidt et de sa larve amphiblastula (Study of the sponge *Oscarella lobularis* Schmidt and its larva amphiblastula with electronic microscope). Fr De

The two basic cell types of the sponge *Oscarella lobularis* are examined by electron microscope.

- Lindberg, G. U.** (1962) M
8-06211
In 8-06015 : 69-82

O sviazi kontinentov Evropy i Ameriky (On the connection between the continents of Europe and North America). En

- Nesis, K. N.** (1962) M
8-06212
In 8-06015 : 83-98

Tikhookeanskies elementy v bentose severo-zapadnoi Atlantiki (Pacific elements in northwestern Atlantic benthos). En

- M
8-06213
- Nesis, K. N.** (1962)
In 8-06015 : 219-25
 Sovetskie issledovaniia bentosa N'iufaundlendsko-Labradorskogo promyslovogo raiona (Soviet investigations of benthos in Newfoundland-Labrador fishing area). En
- M
8-06214
- Cherbonnier, G.** (1962)
Résult. sci. Expéd. océanogr. belge Atlant. Sud, 3 (8) : 24 p.
 Ophiurides (Ophiurids)
 Catalogue of 21 spp. collected in the South Atlantic African waters by Belgian Oceanographic Expedition during 1948-1949 and 1955.
- M
8-06215
- Pasteur-Humbert, C.** (1962)
Nature, Lond., 196 (4856) : 790
 Chromatophoric responses of eyestalk-less shrimps
 Reports that the chromatophoric behaviour of eyestalkless *Palaemon serratus* did not settle completely after bilateral ablation.
- M
8-06216
- Castagné, M.** (1962)
Sci. et Pêche, (103) : 3-7
 Observations sur la salubrité ostréicole dans le bassin d'Arcachon (Observations on the salubrity of the basin of Arcachon for oyster culture)
- M
8-06217
- Medcof, J. C.** (1962)
Gen. Ser. Circ. biol. Sta., St. Andrews, N.B., (36) : 3 p.
 Collecting spat and producing bedding oysters on shell strings
- M
8-06218
- Booolootian, R. A., A. Farmanfarmaian & A. C. Giese** (1962)
Biol. Bull., Woods Hole, 122 (2) : 183-93
 On the reproductive cycle and breeding habits of two western species of *Haliotis*
 Changes in the size of *Haliotis cracherodii* and *H. rufescens* gonads relative to body size throughout the year, are studied.
- M
8-06219
- Branham, J. & C. B. Metz** (1962)
Biol. Bull., Woods Hole, 122 (2) : 194-207
 Inhibition of fertilizing agglutination and fertilization in *Arbacia* by *Fucus* extracts
- M
8-06220
- Dehnel, P. A.** (1962)
Biol. Bull., Woods Hole, 122 (2) : 208-51
 Aspects of osmoregulation in two species of intertidal crabs
 Determines the osmotic behaviour of the two spp. of *Hemigrapsus* when exposed to a series of salinities, as well as to changing seasonal field salinities and studies the effect of temperature on osmotic regulation.

- M
8-06221
- Bauchau, A. G.** (1962)
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Endocrine control of growth in brachyuran Crustacea

Do 61-295me.

- M
8-06222
- Van Damme, N.** (1962)
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Neurosecretion in *Nereis diversicolor*

Do 61-295me. Studies histology of the nervous system, with the help of the recent techniques that stain the neurosecretory material.

- M
8-06223
- Howie, D. I. D.** (1962)
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Neurosecretion in relation to spawning and maturation of the gametes in *Arenicola marina* L.

Do 61-295me.

- M
8-06224
- Durchon, M.** (1962)
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Induction et inhibition expérimentales de l'épitoque par homogreffes chez les Nereidiens (Annélides Polychètes) (Experimental induction and inhibition of epitoky by means of homografting in nereids)

Do 61-295me.

- M
8-06225
- Van Someren, V. D. & P. J. Whitehead** (1961)
Fish. Publ., Lond., (14) : 36 p.

An investigation of the biology and culture of an East African oyster *Crassostrea cucullata*

Data on ecology, including physicochemical data, spawning, biology, growth and culture methods.

- M
8-06226
- Tardy, J.** (1962)
C.R. Acad. Sci., Paris, 255 (23) : 3250-2

Cycle biologique et métamorphose d'*Eolidina alderi* (gastéropode, nudibranche) (Biological cycle and metamorphosis of *Eolidina alderi*, Gasteropoda, Nudibranchia)

Preliminary note describing embryonic development, metamorphosis and growth based on observations of various generations of animals.

- Kuneva-Abadzhieva, V.** (1960) M
8-06227
Trud. nauch.-izsled. Inst. Rib. Prom. Varna, 2 : 149-72
 Prinosa kum izuchavaneto na mekotelnata fauna na Cherno more pred bulgarskiiia briag (Materials to the study of the mollusc fauna in the Black Sea at the Bulgarian shores). Bu En
- Kuneva-Abadzhieva, V.** (1960) M
8-06228
Trud. nauch.-izsled. Inst. Rib. Prom. Varna, 2 : 173-93
 Izsledvane na zoobentosa na Varnenskiia zaliv s ogleđ na mekotelite i malakostrakite (Researches of zoobenthos of the Bay of Varna in respect of Mollusca and Malacostraca). Bu En
- Saidova, Kh. M.** (1961) M
8-06229
Dokl. Akad. Nauk SSSR, 139 (4) : 967-9
 Kolichestvennoe raspredelenie donnykh foraminifer v Antarktike (The quantitative distribution of bottom Foraminifera in Antarctica)
- Kriss, A. E.** (1962) M
8-06230
Dokl. Akad. Nauk SSSR, 146 (6) : 1422-5
 Raspredelenie geterotrofnykh bakterii v vodnoi tolshe Tikhogo okeana (Distribution of heterotrophic bacteria in the waters of the Pacific)
- Koval'skii, V. V., L. T. Rezaeva & G. V. Kol'tsov** (1962) M
8-06231
Dokl. Akad. Nauk SSSR, 147 (5) : 1215-52
 Soderzhanie mikroelementov v organizme i kletkakh krovi astsidi (The content of trace elements in the organism and blood cells of Ascidiaceae)
- Jurko, O.** (1960)* M
8-06232
Nova proizvod., (11) : 322
 Adriatische Algen als Beifutter (Adriatic algae mixed with fodder)
- Humm, H. J.** (1962) M
8-06233
Spec. sci. Rep. Va Inst. Mar. Sci., (37) : 13 p.
 Marine algae of Virginia as a source of agar and agaroids
 Gives vegetative characteristics, methods of extracting and dehydrating the polysaccharides, and the principal physical properties of extractives from *Gelidium crinale*, *Agardhiella tenera*, *Hypnea musciformis*, *Gracilaria verrucosa*, and *G. foliifera*. Indicates their potential economic value as well as for basic research work.
- Seemann, W.** (1960) MF
8-06234
Z. Fisch., 9 (5/6) : 353-64
 Der Sehlendorfer Binnensee (1-6). Limnologische und fischereibiologische Untersuchung eines Strandgewässers an der deutschen Ostseeküste. 2. Die Wasser-, Gelege- und Uferpflanzen des Sehlendorfer Binnensees (The Sehlendorfer inland lake. 1-6. Limnological and biological investigations of a brackish water lake on the Baltic coast. 2. Hydrophytes and shore vegetation of the Sehlendorfer inland lake). En Ru
 Ci 8-06249.

- M
8-06235
- Schmidt, G. A.** (1962)
Dokl. Akad. Nauk SSSR, 147 (6) : 1512-5
 Korreliatsii mezhdru zakladkami khobota i glotki u nemertin *Lineus desori* (mihi, species nova) i *Lineus ruber* (O. F. Mülleri, 1774, G. A. Schmidt, 1945) (Correlation between the rudiments of proboscis and fore-gut (pharynx) in Nemertini *Lineus desori* (mihi, sp. nov.) and *Lineus ruber* (O. F. Müller, 1774, G. A. Schmidt, 1945))
- M
8-06236
- Lewis, E. J. & E. A. Gonzalves** (1962)
Ann. Bot., Lond., 26 (103) : 301-16
 The protein, peptide and free amino-acid contents of some species of marine algae from Bombay
- The technique of circular paper chromatography was utilized for the isolation, confirmation and estimation of amino acids in the proteins, peptides, and free state, in 12 spp. of marine algae collected from Bombay.
- M
8-06237
- Lewis, E. J. & E. A. Gonzalves** (1962)
Ann. Bot., Lond., 26 (103) : 317-27
 Periodic studies of the proteins, peptides, and free amino-acids in *Enteromorpha prolifera* f. *capillaris* and *Ulva lactuca* var. *rigida*
- A study undertaken to ascertain whether any change occurs in the amino-acid constituents of the proteins, peptides, and in the free state in the 2 spp.
- M
8-06238
- Evans, L. V.** (1962)
Ann. Bot., Lond., 26 (103) : 345-60
 Cytological studies in the genus *Fucus*
- An investigation of the chromosome number of the four commoner spp. of *Fucus* using a modified acetocarmine squash technique has revealed a likely diploid complement of 64 and a haploid complement of 32. The uniformity in chromosome number, size, and appearance in the various spp. helps to explain the ease with which hybrids are formed.
- M
8-06239
- Stewart, W. D. P.** (1962)
Ann. Bot., Lond., 26 (103) : 439-45
 Fixation of elemental nitrogen by marine blue-green algae
- Calothrix scopulorum*, *Nostoc entophyllum*, and *Oscillatoria brevis*, isolated from the upper littoral and supralittoral fringe of the sea-shore were obtained in pure culture and tested for fixation of elemental nitrogen.
- M
8-06240
- Ryland, J. S.** (1960)
Proc. zool. Soc. Lond., 134 (1) : 65-105
 The British species of *Bugula* (Polyzoa)
- General account of genus; Key to British species; Systematic account of species; Discussion: confusion between some similar species. Issued also as: *Contr. Mar. Biol. Univ. Wales*.

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Berlioz, J. (1959)*

MF
8-06241

C.R. Soc. Biogéogr., (308) : 89-91

Introduction à l'étude du peuplement biologique de la région antillaise
(Introduction to the study of biological settlements in the West Indian region)

Delaware University. Department of Biological Sciences (1960)
Estuar. Bull., 5 (3) : 15 p.

MF
8-06242

Contains notes dealing with studies of oysters in vicinity of Delaware Marine Laboratory.

Delaware University. Department of Biological Sciences (1961)
Estuar. Bull., 6 (3/4) : 14 p.

MF
8-06243

Contains notes and short popular articles dealing with studies on *Callinectes sapidus* and *Crangon septemspinosa* in vicinity of Delaware Marine Laboratory; incl. also a general article on sharks.

Crichton, O. W. (1960)
Estuar. Bull., 5 (4) : 3-10

MF
8-06244

Marsh crab intertidal tunnel-maker and grass-eater

Reports some observations on the life history, burrowing behaviour, feeding and role in estuarine productivity of *Sesarma reticulatum*.

Salvat, B. (1962)
Cah. Biol. mar., 3 : 219-44

MF
8-06245

Faune des sédiments meubles intertidaux du bassin d'Arcachon (Fauna of the soft intertidal sediments of the basin of Arcachon). En De

An account is given of the crustaceans, mollusks and echinoderms. A few zostera-area dwelling spp. and some brackish forms are also listed. Ecotope, occurrence and geographical distributions are given for each intertidal sp. Place of capture is described with data on intertidal zonation and type of deposit. Special reference is made on *Branchiostoma lanceolatum*.

Redmond, J. R. (1962)
Biol. Bull., Woods Hole, 122 (2) : 252-97

MF
8-06246

Oxygen-hemocyanin relationships in the land crab, *Cardisoma guanhumi*

Ruffo, S. (1960)
Mém. Inst. sci. Madagascar (A), 14 : 63-9

MF
8-06247

Studi sui crostacei anfipodi 56. Anfipodi raccolti dalla spedizione austriaca 1958 nel Madagascar con descrizione di una nuova specie di *Austroniphargus* Monod (Study of crustacean amphipods 56. Amphipods collected by the Austrian expedition of 1958 in Madagascar with description of a new species of *Austroniphargus* Monod). It

- MF
8-06248
- Sawyer, C. N.** (1962)
J. Wat. Poll. Contr. Fed., 34 : 279-90
Causes, effects, and control of aquatic growths
WPA 35 (9) 1864.
- MF
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- Seemann, W.** (1960)
Z. Fisch., 9 (5/6) : 407-16
Der Sehlendorfer Binnensee (1-6). Limnologische und fischereibiologische Untersuchung eines Strandgewässers an der deutschen Ostseeküste. 4. Die Bodenverhältnisse und Bodenbesiedlung des Sehlendorfer Binnensees unter besonderer Berücksichtigung der Fischnährtiere) (The Sehlendorfer inland lake. 1-6. Limnological and biological investigations of a brackish water lake on the Baltic coast. 4. Soil conditions and bottom population of the Sehlendorfer inland lake with special regard to the animals serving as food of edible fish). En Ru
Ci 8-06234.
- F
8-06250
- Barnabash-Nikiforov, I. I.** (1959)*
Zool. Zh., 38 : 767-71
Symbiotic relations of the inhabitants of a beaver burrow
- F
8-06251
- Pankratova, V. Y.** (1959)*
Trud. zool. Inst. Akad. Nauk SSSR, 26 : 296-346
(Benthos of the ponds for rearing *Vimba vimba*, *Chalcalburnus chalcoides* and its changes caused by improved conditions). Ru
- F
8-06252
- Grigialis, A. T.** (1959)*
Trud. Akad. Nauk litovsk. SSR, (B), 4 (20) : 231-7
(Zoobenthos of the lake Shvogin and its dynamics). Li Ru
- F
8-06253
- Vilisova, I. K.** (1959)*
Trav. Sta. limnol. Lac Bajkal, 17 : 305-12
(Contribution to the knowledge of microbenthos of Baikal Sea). Ru
- F
8-06254
- Lazaroff, N. & J. Schiff** (1962)
Science, 137 (3530) : 603-4
Action spectrum for developmental photo-induction of the blue-green alga *Nostoc muscorum*
Experiments show that dark-grown cyanophyte requires a brief exposure to light before it can complete its developmental cycle. Induction is reversed by exposure to green light.
- F
8-06255
- Bishop, N. I.** (1962)
Nature, Lond., 195 (4836) : 55-7
Separation of the oxygen evolving system of photosynthesis from the photochemistry in a mutant of *Scenedesmus*

- Nichiporovich, A. A., V. E. Semenenko & M. G. Vladimirova** (1962) F
8-06256

Izv. Akad. Nauk SSSR (biol.), (2) : 163-72

Intensifikatsiia fotosinteticheskoi produktivnosti kultury odnokletochnykh vodoroslei (Some principles of intensification of photosynthetic productivity of unicellular algae). En

Use of unicellular algae for ensuring human life in cosmic flights. Comparison of productivity of an algal suspension with that of higher plants. Laboratory cultivation and study of photosynthetic productivity.

- Steinbach, H. B.** (1962) F
8-06257
Biol. Bull., Woods Hole, 122 (2) : 310-9
Ionic and water balance of planarians

Experiments on *Dugesia tigrinum* and the ectoparasite of *Limulus*, *Bdelloura* (species not determined).

- Brehm, V.** (1960) F
8-06258
Mém. Inst. sci. Madagascar (A), 14 : 39-58

Ergebnisse der Österreichischen Madagaskar Expedition 1958. 1. Beitrag zur Kenntnis des Planktons madagassischer Stillgewässer (Mitteilung aus der Biologischen Station Lunz) (Results of the Austrian Madagascar Expedition 1958. 1. Contribution to the knowledge of Crustacea in Madagascar stagnant waters. Information from the Biological Station Lunz)

- Hagadorn, I. E.** (1962) F
8-06259
Gen. comp. Endocr., 2 (6) : 516-40
Functional correlates of neurosecretion in the rhynchobdellid Leech, *Theromyzon rude*

Studies the neurosecretory system of the brain with the light microscope and its possible relationship to reproduction by standard endocrinological techniques.

- Herlant-Meewis, H.** (1962) F
8-06260
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962
Endocrine relationship between nutrition and reproduction in the oligochaete, *Eisenia foetida*

Do 61-295me.

- Makhlin, E. E.** (1961) F
8-06261
Dokl. Akad. Nauk SSSR, 139 (4) : 980-3
Teploustoichivost' grudnykh nozhek baikal'skikh gammarid (Heat resistance of thoracic pereopods in Baikalian Gammaridae)

- Wulfert, K.** (1960) F
8-06262
Arch. Hydrobiol., 56 (3) : 261-98

Die Rädertiere saurer Gewässer der Dübener Heide. 1. Die Rotatorien des Zadlitzmoors und des Wildenhainer Bruchs (The rotifers of acid waters in the Dübener Heide. 1. The Rotatoria of the moors of Zadlitz and Wildenhain). En

Investigations carried out during the summer 1958 in Eastern Germany.

- Gusev, M. V.** (1962) F
8-06263
Dokl. Akad. Nauk SSSR, 147 (4) : 947-50

Vliianie rastvorennogo kisloroda na razvitie sinezelenykh vodoroslei (The effect of dilute oxygen on the development of blue-green algae)

Experiments carried out with *Anabaema variabilis* and *Amorphonostoc punctiforme*.

- Spektorov, K. S. & E. A. Lin'kova** (1962) F
8-06264
Dokl. Akad. Nauk SSSR, 147 (4) : 967-9

O novom uprosheennom metode sinkhronizatsii kul'tur khlorelli (A new simplified method of synchronized chlorella culture)

Experiments carried out with *Chlorella pyrenoidosa* and *Chlorella ellipsoidae*.

- Keiz, G. & H.-H. Reichenbach-Klinke** (1961) F
8-06265
Allg. Fisch.Ztg., 86 (20) : 626-30

Über Bühnenteichuntersuchungen am mittleren Main (Investigations into spur dike ponds of the middle Main river)

Report on plankton and bottom fauna composition. Results of stocking measurements.

- Reid, G. W. & J. R. Assenzie** (1961) F
8-06266
Wat. & Sewage Wks, 108 : 264-9

Culture and harvesting of attached algae grown on domestic sewage. 2.

Laboratory and pilot plant studies on municipal sewage in batch and continuous operation made. Predominant algae were *Microspora* and *Chlorella*.

Co 8-08226.

- Barthelmes, D.** (1961) F
8-06267
Z. Fisch., 10 (4/5) : 309-28

Chironomus forma larvalis plumosus in grossen, ablassbaren Karpfenteichen (*Chironomus forma larvalis plumosus* in big drained carp ponds). En Ru

Schlüter, M. (1961)F
8-06268*Z. Fisch.*, 10 (4/5) : 351-9

Zur Bedeutung der litoralen Diatomeen in unseren Gewässern (On the importance of littoral diatoms in our waters). En Ru

The importance of diatoms for the production of food animals is emphasized.

Albrecht, M. L. (1959)F
8-06269*Z. Fisch.*, 8 (7/8) : 481-550

Die quantitative Untersuchung der Bodenfauna fließender Gewässer (Untersuchungsmethoden und Arbeitsergebnisse) (Quantitative investigations of the bottom fauna of running waters. Methods and results of investigations). En Ru

Attempt to compile all the known literature of the present subject as well as to summarize research methods and working results.

Bick, H. (1959)F
8-06270*Z. Fisch.*, 8 (7/8) : 635-8*Gammarus pulex fossarum* KOCH 1835 als Fallaubzersetzer (The role of *Gammarus pulex fossarum* KOCH 1835 in the decomposition of deciduous foliage in waters). En Ru**Surber, E. W.** (1961)F
8-06271*Circ. U.S. Fish Wildl. Serv.*, (128) : 37 p.

Improving sport fishing by control of aquatic weeds

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Maurin, Cl. (1962)M
8-06272*Rev. Trav. Inst. Pêches marit.*, 26 (2) : 163-218

Étude des fonds chalutables de la Méditerranée occidentale (Écologie et pêche). Résultats des campagnes des navires océanographiques 'Président-Théodore-Tissier' 1957 à 1960 et 'Thalassa' 1960 et 1961 (Studies of the trawling grounds of the western Mediterranean (ecology and fisheries). Results of the cruises of the oceanographic vessels 'Président-Théodore-Tissier' 1957 to 1960 and 'Thalassa' 1960 and 1961)

Characteristics of the grounds at different depths and fishing yields of various regions of the area studied. Index of species caught.

Boury, M. (1962)M
8-06273*Sci. et Pêche*, (103) : 1-3

Appréciation de la qualité bactériologique des coquillages (Bacteriological quality of mollusks)

FISHING

- Bérubé, Z.** (1961) M
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Actualités mar., 5 (3) : 24-32
 Les pêcheries maritimes 1960 (The marine fisheries 1960)

Statistical tables and remarks on the catch, values and fish products in the years 1957-1960 in the Quebec district (part of gulf of Saint Laurent, and bay of Chaleurs).

- Film** (1962) M
8-06275
 Vickers Ltd., Vickers House, Broadway, London
 Trawling

- Anon.** (1962) M
8-06276
Bol. Comp. adm. Guano, 38 (1/2) : 12-22
 La explotación del guano de islas en el Perú (The exploitation of guano in the islands in Peru)

Describes geographic situation and characteristics of the coast and the sea of Peru, the food of the guano birds, and the company exploiting the guano.

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- Mathisen, O. A.** M
(1962) 8-06367
Vopr. Ikhtiolog., 1 (22) : 42-54
Sravnitel'naia karakteristika vozrasta i rosta krasnoi *Oncorhynchus nerka* (Walb.) Kuril'skogo ozero, Kamchatki i Bristol'skogo zaliva Aliaski (Comparative characteristics of age and growth of the red salmon (*Oncorhynchus nerka* Walb.) in lake Kuril, Kamchatka and in Bristol Bay, Alaska)
- Anukhina, A. M.** M
(1962) 8-06368
Vopr. Ikhtiolog., 1 (22) : 55-68
Materialy po ekologii belomorskoj navagi *Eleginus navaga* (Pall.) (The biology of the White Sea navaga (*Eleginus navaga*))
- Iudanov, I. G.** M
(1962) 8-06369
Vopr. Ikhtiolog., 1 (22) : 69-72
Stepen' urozhanosti atlanticheskoscandinavskikh sel'dei v 1960 g. po dannym ucheta ikh segoletkov v Barentsevom more (On the quantity of the recruitment of Atlantoscandian herrings in 1960 according to the countings of fingerlings in the Barents Sea)
- Sokolov, V. A.** M
(1962) 8-06370
Vopr. Ikhtiolog., 1 (22) : 73-8
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- Bykov, N. E.** M
(1962) 8-06371
Vopr. Ikhtiolog., 1 (22) : 100-3
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- Anokhina, L. E.** M
(1962) 8-06372
Vopr. Ikhtiolog., 1 (22) : 140-57
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Anwand, K. (1961)M
8-06373*Z. Fisch.*, 10 (4/5) : 383-6Ein weiterer Fund eines Heringszwitters (*Clupea harengus* L.) (A further discovery of a herring hermaphrodite). En Ru

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Buttiaux, R. (1962)M
8-06374*In* 8-06045 : 503-19*Salmonella* problems in the sea

Discusses the topic under chapters: Self-cleansing of the sea; Survival of *Salmonellae* and other enterobacteria in sea water; Behaviour of *Salmonellae* and other enterobacteria within the body of marine fish; *Salmonellosis* caused by fish intake; *Salmonellae* in edible shellfish; *Salmonellae* in fish and shellfish. Incl. bibliographic list.

Oppenheimer, C. H. (1962)M
8-06375*In* 8-06045 : 541-72

On marine fish diseases

Discusses the topic under chapters: Methods of study, Bacterial diseases; Virus diseases; Fungi; Protozoans; Larger parasites; Atypical cell growth; Therapy of marine fish disease; General relationships. Incl. bibliographic list.

Brawn, V. M. (1961)*M
8-06376*Behaviour*, 18 : 239-55Sound production by the cod (*Gadus callarias* L.)

Male and female cod greater than 37 cm in total length heard to produce a low grunting sound in captivity. Sounds in captured cod are produced most frequently in February and March which is associated with spawning and from September to November when they are very aggressive. Sound production in relation to electrical stimulation, fright and temperature are reported.

De Mets, R. (1962)MG
8-06377*Nature, Lond.*, 196 (4849) : 77-8

Submicroscopic structure of the peritrophic membrane in arthropods

Investigations with electron microscope on structure of this membrane reported.

Chester, J. (Ed.) (1960)*MF
8-06378*Symp. zool. Soc. Lond.*, (1) : 181 p.

Hormones in fish. Proceedings of a Symposium held at the Zoological Society of London, Regent's Park, London N.W.1, on 13th October 1959

- Delaware University. Department of Biological Sciences** (1960) MF
Estuar. Bull., 5 (2) : 15 p. 8-06379

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- Bishai, H. M.** (1962) MF
Salm. Trout. Mag., (165) : 111-4 8-06380
 Hydrocoele embryonalis in salmonids (yolk-sac disease)

Reviews literature; describes investigations on *Salmo salar*, *S. trutta*, and *S. t. fario*.

- Hovlid, N. G.** (d.u.) MF
 B.P. 828,076 8-06381
 Purification, aeration and filtration of water in an aquarium

WPA 35 (9) 1718.

- Brown, V. M.** (1962) MF
 U.K. Atom. Energ. Auth., PG-Rep.-288 : 16 p. 8-06382

The accumulation of strontium-90 and yttrium-90 from a continuously flowing natural water by eggs and alevins of the Atlantic salmon and the sea trout

WPA 35 (9) 1876.

- Olivereau, M.** (1962) MF
Gen. comp. Endocr., 2 (6) : 565-73 8-06383

Modification de l'interrenal du smolt (*Salmo salar* L.) au cours du passage d'eau douce en eau de mer (Modification in interrenal cells of smolt (*Salmo salar* L.) during the passage from fresh water to sea water)

- von Harnack, M. & K. Lederis** (1962) MF
 Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962 8-06384

Fine structure of the hypothalamo-neurohypophysial secretory neurones

Do 61-295me. Investigate fine structure of the preoptic neurosecretory cells of *Gadus morrhua*, *Cottus bubalis*, *Salmo irideus*.

- Fänge, R. & E. Östlund** (1962) MF
 Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962 8-06385

Biological effects of a crustacean eyestalk substance

Do 61-295me.

- Kolarov, P. P.** (1960) MF
8-06386
Trud. nauch.-izsled. Inst. Rib. Prom. Varna, 2 : 13-34
Niakoi biologichni nabludeniiia vurkhu chernomorskiia karag'oz (*Alosa kessleri pontica* Eichw.) (Some biological observations on the Black Sea shad, *Alosa kessleri pontica* Eichw.). Bu Fr
- Datta Gupta, A. K. et al.** (1961)* MF
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Annotated list of fishes of Rajasthan
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Nature, Lond., 196 (4854) : 595
Movement of salmon
Reports the recapture of tagged *Salmo salar* (L.) caught at sea by drift nets off the North Mayo coast and marked with a Lea's hydrostatic tag, near Ängelholm in southern Sweden.
- Luk'ianenko, V. I. & E. K. Miserova** (1962) MF
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Dokl. Akad. Nauk SSSR, 146 (4) : 971-4
Sravitel'no-immunologicheskoe izuchenie komplementarnoi funktsii krovi ryb (A comparative-immunological study of the complementary function of blood in fish)
- Tesch, F. W.** (1961) MF
8-06390
Dtsch. Fisch.-Ztg., 8 (5) : 135-7
Über die Rentabilität des Einsatzes von Zandersetzlingen (*Lucioperca lucioperca* L.) in den Bützsee/Neuruppin (On the rentability of stocking with perch-pike fingerlings in the Bützsee/Neuruppin)
- Wojnárovich, E.** (1960) MF
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Z. Fisch., 9 (1/2) : 73-83
Aufzucht der Zanderlarven bis zum Raubfischalter (Rearing of pike-perch larvae until they turn predatory fish). En Ru
- Molnár, G.** (1960) MF
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Z. Fisch., 9 (1/2) : 101-6
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- Schiemenz, F.** (1960) MF
8-06393
Z. Fisch., 9 (1/2) : 133-54
Unterschied der Wanderungen der Fische, insbesondere der Aale verschiedenen Reifegrades, im unkanalisierten Strom und im kanalisiertem Strom und die Bedeutung der Fischtreppe (Differences in the migration of fishes, especially of eels in different stages of maturity, in canalized and uncanalized streams and the importance of fish ladders). En Ru

- Krykhtin, M. L. & A. G. Smirnov** (1962) MF
Vopr. Ikhtiol., 1 (22) : 29-41 8-06394
 O vzaimosvyezichislennosti i kachestvennykh lososei pokazatelei nerestovykh stad amurskikh (On the interrelation of number and conditions indices of spawning stocks of the Amur salmon)
- Demin, L. Z.** (1962) MF
Vopr. Ikhtiol., 1 (22) : 90-9 8-06395
 Poluprokhodnye ryby del'ty Tereka (Semimigratory fishes of the Terek delta)
- Ivlev, V. S.** (1962) MF
Vopr. Ikhtiol., 1 (22) : 158-68 8-06396
 Aktivnyi energeticheskii obmen u mal'kov bal'tiiskogo lososia (*Salmo salar* L.) (Active energy metabolism in young Baltic salmon (*Salmo salar* L.))
- Girsa, I. I.** (1962) MF
Vopr. Ikhtiol., 1 (22) : 183-91 8-06397
 Vliianie izmeniaiushcheisia osveshchennosti na dostupnost' kormovykh organizmov dlia khishchnykh ryb raznykh ekologicheskikh grupp (The influence of changing of illumination upon accessibility of food organisms for predatory fish of different ecological groups)
- Švob, T.** (1959)* MF
Rib. Jugosl., (14/4) : 81-5 8-06398
 Some advantages and difficulties in the investigation of the alimentary tract of fishes by a modified roentgenologic method
- Tesch, F. W.** (1959) MF
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 Die Zanderlaichverhältnisse (*Lucioperca lucioperca* L.) auf Grund von Laichnestkontrollen im Müggelsee (Spawning conditions of pike-perch (*Lucioperca lucioperca* L.) based on the controls of spawning nests in the Müggelsee). En Ru
- Thurrow, F.** (1959) MF
Z. Fisch., 8 (7/8) : 597-626 8-06400
 Über Fangerträge und Wachstum des Aales in der westlichen Ostsee (Yields and growth of eels in the western Baltic). En Ru
 Deals with the importance to fishery, growth food, the border between the maturing eel and adult eel state, and the sex ratio of *Anguilla anguilla*

Steffens, W. (1960)

MF
8-06401

Z. Fisch., 9 (3/4) : 161-272

Ernährung und Wachstum des jungen Zanders (*Lucioperca lucioperca* L.) in Teichen (Food and growth of the young pike-perch *Lucioperca lucioperca* L. in ponds). En Ru

Investigations carried out in various ponds in Lusatia. Contents of stomach and intestine showed that pike-perch feed usually on invertebrates. Tables given. Growth and weight related to quality and quantity of food and to stocking density. Producing simultaneously food carps and one-year-old pike-perch may increase considerably the economy of pond fishculture. Bibliography.

Ivlev, V. S. (1962)*

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8-06402

Zh. obshch. Biol., 23 : 72-3

Smoltifikatsiia lososevykh i es biologicheskoe znachenie (Smoltification of salmon and its biological significance)

Janković, D. (1964)

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FAO Fish. Synops., (24 Rev. 1) : 45 p.

Synopsis of biological data on European grayling *Thymallus thymallus* (Linnaeus) 1758

NE 62-02715.

Deelder, C. L. & J. Willemsen (1964)

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8-06404

FAO Fish. Synops., (28) : 52 p.

Synopsis of biological data on pike-perch *Lucioperca lucioperca* (Linnaeus) 1758

Reviews information on identity, distribution, bionomics, and life history, population and exploitation of this sp. in European and adjacent inland waters. Incl. a comprehensive bibliography on the subjects reviewed.

Frey, H. (1959)

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8-06405

Radebeul, Neumann Verlag, 600 p.

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8-06406

Acta biol. Acad. Sci. hung., 3 : 18 p.

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Behrend, E. R. & M. E. Bitterman (1961)

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Amer. J. Psychol., 74 : 542-51

Probability-matching in the fish

PA 36 (4) 4EL42B. Account of experiments with African mouthbreeders. Finds an important functional difference between fish and mammal.

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- Warsaw. Instytut Rybactwa Śródlądowego** (1961) F
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Monografia biologiczno-gospodarcza troci (*Salmo trutta morpha lacustris* L.) jeziora Wdzydze . . . Lake-trout of Wdzydze Lake. Ru En

Incl. bibliographies.

- Mann, T. & E. D. Wilson** (1962) F
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J. Endocrin., 25 (3) : 407-8

Biochemical observations on the male accessory organs of nutria *Myocastor coypus* (Molina)

- Anon.** (1962) F
8-06411
Colon. annu. Rep. (Sarawak), 66-7
Freshwater fisheries

TA (6) j3155. The main species cultivated are: *Tilapia mossambica*, *Trichogaster pectoralis* and *Cyprinus carpio*.

- Anon.** (1962) F
8-06412
Rep. E. Afr. agric. Fish. Res. Coun., 38-48
East African freshwater fishery research organization

TA (6) j3151. A discussion on the fisheries of Lake Victoria and pond-fisheries. For the first time for any tropical fresh water fishery a method has been found, making rational fish-exploitation possible based on parameters of fish growth, fishing effort, fecundity and net selectivity. Species discussed are *Tilapia zillii*, *T. variabilis*, *T. esculenta* and the predator *Bagrus docmac*.

- Anon.** (1962) F
8-06413
Colon. annu. Rep. (Jamaica), 341-2
Inland fisheries

TA (6) j3152. It is estimated that the area of water producing *Tilapia mossambica* in Jamaica exceeds 600 ha.

- Inger, R. F. & Chin Phui Kong** (1962) F
8-06414
Fieldiana, Zool., 45 : 1-268
The fresh-water fishes of North Borneo

TA (6) : j3154. Basic information on the fishes now known in North Borneo is followed by ecological information obtained at 12 observation stations. *Tilapia mossambica* is now the most popular fish for rearing in ponds.

- Groenewald, A. A. v. J.** (1961) F
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Fauna & Flora, (12) : 47-55
Clarias, the freshwater barbel. Af

Popular account of this catfish (morphology, physiology, ecology, etc.) with special reference to South Africa.

- Lombard, G. L.** (1961) F
8-06416
Fauna & Flora, (12) : 79-85
The first introduction and production of Aischgrund carp in South Africa. Af

Refers to *Cyprinus carpio* (Dinkelsbühl variety).

- Wundsch, H. H.** (1960) F
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Dtsch. FischZtg., 7 (7) : 193-4
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Comprehensive review of association between water poultry and fish.

- Zobel, H.** (1960) F
8-06418
Dtsch. FischZtg., 7 (7) : 195-
Die Entenproduktion der Binnenfischerei im Jahre 1959 (The duck production of inland fisheries in 1959)

Comprehensive review of association between water poultry and fish.

- Blume, H.** (1960) F
8-06419
Dtsch. FischZtg., 7 (7) : 196-204
Entenmast in Verbindung mit der Karpfenzucht (Fattening of ducks in connection with carp rearing)

Comprehensive review of association between water poultry and fish.

- Hoffman, Suchowerow & H. Weisflog** (1960) F
8-06420
Dtsch. FischZtg., 7 (7) : 213-24
Die kombinierte Enten- und Fischwirtschaft Gjelka (The combined ducks and fish farm Gjelka)

Comprehensive review of association between water poultry and fish.

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8-06421

U.S. Atom. Energ. Comm., HW-72107 : 12 p.

The uptake of strontium from diet and water bay rainbow trout

WPA 35 (9) 1875.

Hochachka, P. W. (1962)

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8-06422

Gen. comp. Endocr., 2 (6) : 499-505

Thyroidal effects on pathways for carbohydrate metabolism in a teleost

Tests the influence of thyroxine and 3,5,3'-triiodothyronine on the metabolism of gluconate-1-C¹⁴ and acetate-1-C¹⁴ in *Salvelinus fontinalis*.

Combescot, C. & J. Demaret (1962)

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8-06423

Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

The histophysiology of the epiphysis in the water turtle, *Emys leprosa* Schw.

Do 61-295me.

Follett, B. K. & H. Heller (1962)

F
8-06424

Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

The neurohypophysial hormones of the African lungfish (*Protopterus aethiopicus*)

Do 61-295me.

Thornburn, C. C. & A. J. Matty (1962)

F
8-06425

Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Effect of thyroxine on some aspects of nitrogen metabolism in the goldfish, *Carassius auratus*

Do 61-295me.

Swift, L. D. R. & G. E. Pickford (1962)

F
8-06426

Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Seasonal variations in the growth hormone content of pituitary glands of the perch, *Perca fluviatilis*

Do 61-295me.

- Reinboth, R.** (1962) F
8-06427
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The effects of testosterone on female *Coris julis* (L.), a wrasse with spontaneous sex-inversion

Do 61-295me.

- Bard, J.** (1962)* F
8-06428
Bois For. Trop. : 31-47

Où en est actuellement la pisciculture africaine? (What is the actual situation of African fishculture?)

- Gonzalo, J. Arroyo, S. J.** (1962) F
8-06429
FAO Fish. Pap., (21) : 22 p.

Fish pond development planning with the help of linear programming

Mathematical presentation of the linear programming technique; discussion of significance of this technique and detailed presentation of different models for fish pond operations; and description of different features of possible research into production functions in fish pond operations.

- Harrold, L. L. et al.** (1962) F
8-06430
Tech. Bull. U.S. Dept. Agric., (1256) : 194 p.

Influence of land use and treatment on the hydrology of small watersheds at Coshocton, Ohio, 1938-1957

This study takes the initial steps in developing concepts and techniques that may aid in understanding how several levels of land management for crop and timber production have affected streamflow from a set of small, mixed-cover watersheds at the Soil and Water Conservation Research Station near Coshocton, Ohio. An analysis based on these developed techniques or concepts is tested and the results are discussed. Details of the research installations at the Coshocton station, physical characteristics of the area, and a climatic description are given in part 2.

- Bulkley, R. V.** (1961) F
8-06431
Res. Rep. U.S. Fish Serv., (54) : 31 p.

Fluctuations in age composition and growth rate of cutthroat trout in Yellowstone Lake

- Ball, O. P. & O. B. Cope** (1961) F
8-06432
Res. Rep. U.S. Fish Serv., (55) : 62 p.

Mortality studies on cutthroat trout in Yellowstone Lake

- Shell, E. W.** (1961) F
8-06433
Res. Rep. U.S. Fish Serv., (57) : 36 p.

Chemical composition of blood of smallmouth bass

F

Lambou, V. W. (1962)

8-06434

J. Wildlife Mgmt, 26 (2) : 193-202

Distribution of fishes in lake Bistineau, Louisiana

Population sampled by use of rotenone to determine if fishes were randomly distributed.

F

Heintz, E. (1962)

8-06435

C.R. Acad. Sci., Paris, 255 (23) : 3241-3

Le potentiel électrique de la muqueuse olfactive des poissons, du veau et du porc, en fonction de la concentration de solutions aqueuses olfactives (The electric potential of the olfactory tissue of fish, veal and pork, in relation with the aqueous solution concentration of olfactories)

Preliminary note on a comparative study based on experiments with *Danio malabaricus*, *Carassius carassius*, *Rhodeus amarus*.

F

Shul'man, G. E. (1962)

8-06436

Dokl. Akad. Nauk SSSR, 147 (3) : 724-6

Elementy azotnogo balansa i pishchevye ratsiony azovskoi khamsy (*Engraulis encrasicolus maeoticus* Pusanov) (Elements of protein equilibrium and the food rations of *Engraulis encrasicolus maeoticus* Pusanov)

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Ostroumova, I. N. (1962)

8-06437

Dokl. Akad. Nauk SSSR, 147 (1) : 263-4

O pervom poiavlenii gemoglobina u embrionov raduzhnoi foreli (*Salmo irideus* Gibbons) (The first appearance of haemoglobin in embryos of *Salmo irideus* Gibbons)

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Gundrizer, A. I. (1962)

8-06438

Izv. sib. Otd. Akad. Nauk SSSR, (3) : 111-9

K biologii siga pravdina iz Teletskogo ozera i reki Bii (On the biology of *Coregonus pravdinellus* from lake Teletskie and river Bija)

III. morphological characteristics.

F

Wunder, W. (1961)

8-06439

Fischwirt, 11 (6) : 144-50

Vorschläge zur planmässigen Bekämpfung der Bauchwassersucht durch Entseuchung im Bundesgebiet (Proposals for a regular control of ascites by means of disinfection in the Federal Republic)

F

Schäperclaus, W. (1961)

8-06440

Dtsch. Fisch.-Ztg., 8 (5) : 137-44

Aus der Teichwirtschaft Jugoslawiens (Pond management in Jugoslavia)

- F
8-06441
- Kozianowski, A.** (1961)
Dtsch. Fisch.-Ztg., 8 (5) : 144-50
 Kostenanalyse und Rentabilität der künstlichen Maränenzucht
 Brutanstalten (Expenditure and rentability of artificial breeding of
Coregonus albula)

- F
8-06442
- Brunner, G. & H. Reichenbach-Klinke** (1961)
Allg. FischZtg., 86 (10) : 310-1
 Beitrag zur Fleckenseuche des Hechtes (Contribution to the spot disease
 in pike)

Probably caused by *Pseudomonas punctata*.

- F
8-06443
- Schäperclaus, W.** (1961)
Dtsch. Fisch.-Ztg., 8 (4) : 110-6
 Steigerung der Erträge in der Teichwirtschaft (Increased yields in pond
 management)

- F
8-06444
- Libosvářský, J.** (1961)
Dtsch. Fisch.-Ztg., 8 (4) : 120-4
 Forellenzucht in der Tschechoslowakei (Trout breeding in Czechoslovakia)

- F
8-06445
- Müller, W.** (1960)
Z. Fisch., 9 (1/2) : 1-72
 Beiträge zur Biologie der Quappe (*Lota lota* L.) nach Untersuchungen in
 den Gewässern zwischen Elbe und Oder (Contributions to the biology of
Lota lota L. according to the researches carried out in the waters between
 Elbe and Oder). En Ru

III. description of growth, reproduction, and food utilization.

- F
8-06446
- Hnatevič, B.** (1960)
Z. Fisch., 9 (1/2) : 85-93
 Das Wachstum des Barsches (*Perca fluviatilis* L.) in dem Orava-Staubecken
 (Slowakei) (The growth of perch (*Perca fluviatilis* L.) in the Orava reservoir
 (Slovakia). En Ru

- F
8-06447
- Faktorowitsch, K.** (1960)
Z. Fisch., 9 (1/2) : 95-9
 Über das Wesen des Stoffes, der sich in der Leber der Regenbogenforelle
 bei der sogenannten lipoiden Degeneration der Leber ablagert (The sub-
 stance settling at the so-called lipid degeneration in the liver of rainbow
 trout). En Ru

This substance is to be regarded as ceroid, formed in the liver of trout owing
 to the self-oxidation of unsaturated fatty acids being pathologically accumu-
 lated in it.

Pevzner, R. A. (1962)

F
8-06448

Dokl. Akad. Nauk SSSR, 147 (5) : 1187-90

Tsito-gistokhimicheskie issledovaniia vkusovykh lukovits kostistyykh ryb (*Cyprinus carpio* i *Carassius carassius*) (Cytohistochemical investigations of the taste bulbs in Teleostei (*Cyprinus carpio* and *Carassius carassius*))

Strelkov, Iu. A. (1962)

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8-06449

Dokl. Akad. Nauk SSSR, 147 (5) : 1253-5

O novom vide monogeneticheskogo sosal'schchika *Acolpenteron petruschewskyi* prisposobivshemsia k obitaniiu v vydelitel'noi sisteme gorchakov (On a new species of monogenetic trematode—*Acolpenteron petruschewskyi*, adapted to the existence in the excretory system of cyprinoid fish)

Bolgin, V. M. (1962)

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8-06450

Vopr. Ikhtiol., 1 (22) : 79-88

Morfologicheskie osobennosti leshcha, akklimatizirovannogo v ozere Ubinskom (Morphological peculiarities of bream acclimatised in the Ubinskoie Lake)

Fedorov, V. G. (1962)

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8-06451

Vopr. Ikhtiol., 1 (22) : 89-

Nakhozhdenie bychka-podkamenshchika (*Cottus gobio* L.) v zapadnoi Sibiri (On the occurrence of common sculpin (*Cottus gobio* L.) in western Siberia)

Cherfas, N.B. (1962)

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Vopr. Ikhtiol., 1 (22) : 104-15

Radiatsionnoe porazhenie gonad karpa (Influence of radiation on gonads of carp)

Vladimirov, V. I. (1962)

F
8-06453

Vopr. Ikhtiol., 1 (22) : 116-26

Razmnozhenie rybtsa (*Vimba vimba carinata*) (Pall.) v Dnepre posle soorusheniia Kakhovskoi GES (Reproduction of *Vimba vimba carinata* (Pall.) in the Dneiper after the construction of the Kakhov hydroelectric power station)

Soin, S. G. (1962)

F
8-06454

Vopr. Ikhtiol., 1 (22) : 127-39

Embrional'nye prisposobleniia k dykhaniiu u ryb i osobennosti ikh razvitiia u baikal'skikh bychkov-podkamenshchikov (Cottoidei) (Embryonic adaptations to respiration in fish and their peculiarities in the Baikal sculpins, Cottoidei)

Bogatova, I. B. (1962)

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Vopr. Ikhtiol., 1 (22) : 169-73

Pitanie molodi semgi (*Salmo salar* L.) na rannikh stadiakh razvitiia pri vyrashchivanii v prudakh (Feeding of young salmon (*Salmo salar* L.) on early stages of development rearing in fishponds)

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- Poposhev, S. I.** (1962)
Vopr. Ikhtiol., 1 (22) : 174-82
 O pitanii amurskogo belogo lesheha (*Parabramis pekinensis* Bas.) (On feeding of the white bream (*Parabramis pekinensis* Bas.))

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- Miller, J. & K. Buss** (n.d.)
 Pennsylvania Fish Commission, Conservation Education Commission, 26 p.
 The age and growth of the fishes in Pennsylvania

SFA 7 (3) 5224. Includes age and growth studies of largemouth bass, smallmouth bass, bluegill, yellow perch, pumpkinseed, northern pike, muskellunge, black crappie, white crappie, walleye, redbreast sunfish, rock bass, brown trout, brook trout, rainbow trout and chain pickerel.

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- Ishii, S.** (1961)
J. Fac. Sci. Univ. Tokyo, 9 (2) : 278-90
 Effects of some hormones on the gestation of the top minnow

SFA 7 (3) 5239. In *Gambusia* sp. interval between successive deliveries were about 25 days at $27.5 \pm 1.5^{\circ}\text{C}$, under illumination for 15 hours per day. Administration of progesterone or mammalian gonadotrophins did not exert any noticeable effect on ovary. Treatment with estradiol benzoate induced premature release of embryos in females during late gestation period, and inhibited the growth of oocytes and sometimes caused death of developing embryos in the ovary of females at an early gestation period. Noxious effect on embryos was diminished by concurrent injections of ovine lactogenic hormone.

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- Švob, T.** (1959)*
Acta ichthyol., Sarajevo, (12) : 97-155
 Radiographs of the digestive tract of some species of freshwater fish.

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8-06460
- Nümann, W.** (1961)
Z. Fisch., 10 (4/5) : 241-52

Das Problem der Ertragssteigerung und Überfischung in der Blaufelchen-fischerei am Bodensee (The problem of increase in yield and overfishing in the blue char fisheries in lake Constance). En Ru

Optimum catches which do not endanger the stock are possible, when an adequate amount of food is supplied and the fishing rate is kept within bounds protecting largely the young fish in its best growing age and before reaching the maturity stage.

- Albrecht, M.-L. & F. W. Tesch** (1961) F
8-06461
Z. Fisch., 10 (4/5) : 253-73

Das Wachstum der Bachforelle (*Salmo trutta fario* L.) in der Polenz in Abhängigkeit von verschiedenen Umweltbedingungen (The growth of trout (*Salmo trutta fario* L.) in the Polenz in dependency of several environmental factors). En Ru

Experiments carried out for a period of 5 years. Great amount of food animals, slow and moderate flow, big water area, tranquil pools and bays are advantageous for the growth.

- Ziemiankowski, W. B. & E. Cristea** (1961) F
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Z. Fisch., 10 (4/5) : 275-98

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Examinations carried out in the lakes and flooded area of the lower Danube.

- Abrosow, V. & O. Bauer** (1961) F
8-06463
Z. Fisch., 10 (4/5) : 299-307

Die Peledmaräne—ein neues Objekt der Fischwirtschaft (*Coregonus peled* (Gmelin)—a new object in fish management). En Ru

The marane, *Coregonus peled*, introduced as spawn from the lakes of western Siberia in 1953 proved a valuable breeding object in the northwestern regions of the USSR. References are given on the biotechnics for breeding this valuable fish.

- Lieder, U.** (1961) F
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Z. Fisch., 10 (4/5) : 329-50

Untersuchungsergebnisse über die Grätenzahlen bei 17 Süßwasser-Fischarten (Results of investigations of intermuscular bones in 17 freshwater species). En Ru

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Die Einbürgerung der Kleinen Maräne (*Coregonus albula* L.) im Scharmützelsee) (Restocking of white fish in the Scharmützelsee). En Ru

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- Merla, G.** (1959) F
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Barthelmes, D. (1960)
Z. Fisch., 9 (3/4) : 273-80

Tetrahymena parasitica (Penard 1922) Corliss 1952 als Parasit in Larven vom *Chironomus-plumosus*-Typ (*Tetrahymena parasitica* (Penard 1922) Corliss 1952 parasite in *Chironomus plumosus* larvae). En Ru

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Müller, W. (1960)
Z. Fisch., 9 (5/6) : 321-32

Untersuchungen über die Nachwirkung einer im Vorjahr gegebenen Phosphatdüngung in Teichen (Investigations of the after-effect of a phosphate application from the preceding year in ponds). En Ru

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Swarup, H. (1959)
J. Genet., 56 (2) : 129-42

Production of triploidy in *Gasterosteus aculeatus* (L.)

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Swarup, H. (1959)
J. Genet., 56 (2) : 143-55

Effect of triploidy on the body size, general organization and cellular structure in *Gasterosteus aculeatus* (L.)

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Swarup, H. (1959)
J. Genet., 56 (2) : 156-60

The oxygen consumption of diploid and triploid *Gasterosteus aculeatus* (L.)

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Van Duijn, C., Jr. (1962)
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The abnormal female hybrid is described. Histomorphological data on the pituitary, thyroid, and adrenal glands are presented, and an attempt is made to relate them to ovipositor growth.

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Campana-Rouget, Y. (1962)
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- Gonzalez, R. C., R. M. Eskin & M. E. Bitterman** (1961)
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- Kornicker, L. S. (1961)**
J. Soil Wat. Conserv., 16 (5) : 214-6
 Utilizing the natural resources of the sea

World conferences dealing with population growth and food supplies have repeatedly emphasized that great weight should be given to increasing the production of protein food from the sea. If living and mineral resources are to be utilized effectively, more intensive program of fundamental and applied research must be initiated. This article, slightly revised, is text of the author's presentation at the Dec. 1960 meeting of the American Association for the Advancement of Science, Section E, geology and geography. Issued also as: *Contr. Oceanogr. Met. A, and M. Coll. Tex.*, 1960-1961, (178).

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Extensive provisions covering most aspects of sea fisheries, including fishing vessels, fish processing factories, financial assistance, etc.

- Argentina. Laws, Statutes, etc.** (1962) M
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Bol. ofic. Argent., (19.788) : 2

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Of the type 'purse-seiner'.

- New South Wales. Laws, Statutes, etc.** (1962) MF
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Proclamation, made under the fisheries and oyster farms act, 1935, as amended relating to the whole of the waters of Shaw's Bay, county of Rous.—9 May 1962

Prohibits fishing with spears, spearguns and similar devices, in the tidal waters specified, from 1 May 1962 to 1 Jun. 1965.

- Belgium. Laws, Statutes, etc.** (1962) M
8-06492
Monit. belge, (152) : 5465

Arrêté ministériel du 18 juin 1962 interdisant temporairement la pêche dite 'à la traine' pratiquée sur embarcation à moteur (Ministerial order temporarily prohibiting drag-net fishing using vessels equipped with engines.—18 June 1962). *Fr Ne*

To put an end to abuses. Valid until the Saturday preceding the second Sunday in Jun. 1963 exclusive.

Chile. Laws, Statutes, etc. (1962)

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Diario ofic., Santiago, (25,271) : 1249-50

Decreto núm. 368 de 20 de marzo de 1962. Modifica el presupuesto para 1961 de la Corporación de Fomento de la Producción (Decree No. 368 amending the budget of the Production Development Corporation for 1961.—20 March 1962)

Includes investment in an industrial fishing project.

Ecuador. Laws, Statutes, etc. (1962)

M
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Reg. ofic. Ecuador, (170) : 1400-1

Decreto N° 749 de 15 de mayo de 1962. Reglaméntase la pesca del atún en aguas equatorianas (Decree No. 749 regulating tunny fishing in Ecuadoran waters.—15 May 1962)

Prohibits purse-seine fishing in the described sea area.

Cyprus. Laws, Statutes, etc. (1961)

M
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Episs. Ephēm. kypriaks Dēmokr., (102) : 388

Arith. No. 44 : Nomos tropopoion ton peri alieias nomon. (Kef. 135) (Act No. 44 of 1961: fishing (amendment) act, 1961)

Amendment in respect of penalties.

Germany, Eastern. Laws, Statutes, etc. (1962)

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Anordnung Nr. 2 über den Fischfang im Bereich der Küstenfischerei (Küstenfischereiordnung).—Vom 9. Mai 1962 (Order No. 2 relative to coastal fishing (coastal fisheries order).—9 May 1962)

Amends order of 18 May 1960 on same subject, with regard to minimum size of fish and to penalties.

Germany. Federal Republic. Laws, Statutes, etc. (1962)

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Richtlinien für die Gewährung von Neubaudarlehen an Unternehmen der Grossen Hochsee und Grossen Heringsfischerei.—Vom 28. Mai 1962 (Rules for the granting of loans to large concerns engaged in high seas and herring fishing for the building of new fishing craft.—28 May 1962)

For the modernization and rationalization of fishing.

Madagascar. Laws, Statutes, etc. (1962)

M

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J. off. Répub. malgache, (224) : 934-7

Décret n° 62-213 du 18 mai 1962, réglementant le contrôle de la salubrité et des conditions de conservation des produits de la mer d'origine animale destinés à la consommation (Decree No. 62-213 regulating the sanitary inspection and the control of the conditions of preservation of sea produce of animal origin for human consumption.—18 May 1962)

Extensive and detailed regulations, dealing with: hygienic control of fish, crustaceans and echinoderms; conditions for the installation and operation of factories or plants processing marine products; and conditions for the preparation and sale of salted, dried or smoked marine products.

Peru. Laws, Statutes, etc. (1962)

M

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Peruano, (6246) : 1 p.

Resolución ministerial N° DC-289 por la que se reconoce oficialmente a la Asociación de Armadores Pesqueros del Perú.—10 de febrero de 1962 (Ministerial resolution No. DC-289 giving official recognition to the Fishing Vessel Owners' Association of Peru.—10 February 1962)

Peru. Laws, Statutes, etc. (1962)

M

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Peruano, (6251) : 1 p.

Resolución ministerial N° DC-341 relativa a los requisitos para que las embarcaciones se hagan a la mar.—19 de febrero de 1962 (Ministerial resolution No. DC-341 relative to the conditions that must be fulfilled for fishing vessels to put to sea.—19 February 1962)

Lays down nine requirements respecting equipment and certificates.

Peru. Laws, Statutes, etc. (1962)

M

8-06501

Peruano, (6287) : 2 p.

Resolución ministerial N° DC-480 por la que se autoriza el funcionamiento de la escuela técnica naval José Olaya.—10 de marzo de 1962 (Ministerial resolution No. DC-480 authorizing the operation of the José Olaya technical naval school.—10 March 1962)

Designed for masters and engineers of fishing vessels.

Peru. Laws, Statutes, etc. (1962)

M

8-06502

Peruano, (6284) : 1 p.

Resolución suprema N° 38 estableciendo que los cargamentos de harina de pescado que se exporten por el Callao deberán transportarse directamente al costado de los barcos.—29 de marzo de 1962 (Supreme resolution No. 38 providing that shipment of fish meal for export through Callao should be transported directly alongside the vessels loading.—29 March 1962)

Avoids fire risks.

M
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Peru. Laws, Statutes, etc. (1962)
Peruano, (6295) : 2 p.

Resolución ministerial N° 1201 por la que se revalida una licencia para fábrica de harina de pescado.—23 de marzo de 1962 (Ministerial resolution No. 1201 relative to the revalidation of a licence for a fish meal plant.—23 March 1962)

Refers to a fish meal plant in the Supe area.

M
8-06504

Peru. Laws, Statutes, etc. (1962)
Peruano, (6299) : 2 p.

Resolución ministerial N° 1233 por la que se autoriza utilizar una licencia para fábrica de harina de pescado en Chancay.—27 de marzo de 1962 (Ministerial resolution No. 1233 authorizing the use of a fish plant licence issued for Chancay.—27 March 1962)

The licence issued under ministerial resolution No. 4949 of 30 Dec. 1961 was for the Chancay area. The present resolution allows the use of the same licence for the establishment of a fish meal plant in the Huarmey area in substitution for the Chancay area.

M
8-06505

Peru. Laws, Statutes, etc. (1962)
Peruano, (6292) : 2 p.

Resolución ministerial N° 1347 por la que se prorroga el plazo para trasladar una fábrica de harina de pescado de Paita a Supe.—30 de marzo de 1962 (Ministerial resolution No. 1347 extending the time limit allowed for the transfer of a fish meal plant from Paita to Supe.—30 March 1962)

Until 15 Apr. 1963.

M
8-06506

Peru. Laws, Statutes, etc. (1962)
Peruano, (6299) : 2 p.

Resolución ministerial N° 1401 por la que se autoriza una licencia provisional para una fábrica de harina de pescado en Chancay.—4 de abril de 1962 (Ministerial resolution No. 1401 granting a provisional licence for a fish meal plant at Chancay.—4 April 1962)

Capacity of 4 tons an hour.

M
8-06507

Peru. Laws, Statutes, etc. (1962)
Peruano, (6304) : 2 p.

Resolución ministerial N° 1400 por la que se autoriza una licencia provisional para una fábrica de harina de pescado en Chancay.—4 de abril de 1962 (Ministerial resolution No. 1400 granting a provisional licence for a fish meal plant at Chancay.—4 April 1962)

Capacity of 4 tons an hour.

Peru. Laws, Statutes, etc. (1962)M
8-06508*Peruano*, (6291) : 1 p.

Decreto supremo relativo al impuesto de timbres en la liquidación que efectúan las embarcaciones de pesca.—9 de abril de 1962 (Supreme decree relative to the stamp tax on liquidation payments made by fishing vessels.—9 April 1962)

When the captains and crews of fishing vessels are paid off, such payment shall be subject to a stamp tax of 4.5 per mil payable by the captains and crew members concerned.

Peru. Laws, Statutes, etc. (1962)M
8-06509*Peruano*, (6307) : 1 p.

Resolución directoral N° 21 por la que se establece el plazo para que las embarcaciones pesqueras se provean de elementos de seguridad.—9 abril de 1962 (Directorial resolution No. 21 laying down the time limit within which fishing vessels must be equipped with life-saving equipment.—9 April 1962)

Limit of 90 days from publication of resolution.

Peru. Laws, Statutes, etc. (1962)M
8-06510*Peruano*, (6311) : 1 p.

Resolución ministerial N° 1908 por la que se autoriza el uso de una licencia provisional para instalar fábrica de harina de pescado en Chancay.—28 de abril de 1962 (Ministerial resolution No. 1908 authorizing the use of a provisional licence for the installation of a fish meal plant in Chancay.—28 April 1962)

Capacity of 4 tons an hour.

Peru. Laws, Statutes, etc. (1962)M
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Resolución ministerial N° 1953 por la que se otorga una licencia provisional para fábrica de harina de pescado en Végueta.—2 de mayo de 1962 (Ministerial resolution No. 1953 granting a provisional licence for a fish meal plant in Végueta.—2 May 1962)

Capacity of 30 tons an hour.

South West Africa. Laws, Statutes, etc. (1962)M
8-06512*Off. Gaz. S.W. Afr.*, (2397) : 491

Goewermentskennisgewing No. 73. Wysiging van regulasies op robbevangs en wisserye.—1 Mei 1962 (Government notice No. 73 relating to amendment of regulations on sealing and fisheries.—1 May 1962)

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Spain. Laws, Statutes, etc. (1962)
Bol. ofic. Estado, Madr., (125) : 7068

Orden de 12 de mayo de 1962 por la que se fija el tipo de interés exigible en los préstamos que se otorguen por la Caja Central de Crédito Marítimo y Pesquero (Order fixing the interest payable on loans granted by the Central maritime and fisheries credit fund.—12 may 1962)

At 4 per cent.

M

8-06514

Spain. Laws, Statutes, etc. (1962)
Bol. ofic. Estado, Madr., (146) : 8436

Orden de 13 de junio de 1962 por la que se crea la comisión nacional para evitar la contaminación de las aguas del mar por los hidrocarburos (Order establishing the national commission to avoid the contamination of sea water by oil.—13 June 1962)

To study water pollution problems and examine possible ratification by Spain of the 1954 London convention for the prevention of pollution of the sea by oil.

M

8-06515

Spain. Laws, Statutes, etc. (1962)
Bol. ofic. Estado, Madr., (149) : 8728-9

Decreto 1356/1962 de 14 de junio, por el que se determinan los dispositivos de salvamento e instalaciones radioeléctricas de que han de ir provistas las embarcaciones de pesca (Decree No. 1356 establishing the life-saving and radio equipment with which fishing vessels shall be provided.—14 June 1962)

General technical requirements.

M

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Spain. Laws, Statutes, etc. (1962)
Bol. ofic. Estado, Madr., (169) : 9857-8

Orden de 18 de junio sobre clasificación de las industrias de harinas de pescado (Order on the classification of fish meal industries.—18 June 1962)

First group to comprise fish processing plants and second group to include guano and fish manure processing plants.

M

8-06517

Spain. Laws, Statutes, etc. (1962)
Bol. ofic. Estado, Madr., (169) : 9861-3

Orden de 30 de junio de 1962 por la que se dictan normas para desarrollo del decreto número 1356/1962, de 14 de junio, que determina los dispositivos de salvamento e instalaciones radioeléctricas de que han de ir provistas las embarcaciones de pesca (Order laying down rules for the application of decree No. 1356 of 14 June 1962, establishing the life-saving and radio equipment with which fishing vessels shall be provided.—30 June 1962)

Detailed technical requirements.

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Bol. ofic. Estado, Madr., (169) : 9863-6
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 Prescribes mesh size, minimum size of fish, etc.
- M
8-06519
- Tunisia. Laws, Statutes, etc. (1962)**
J. off. Tunis., (58) : 840
 Arrêté du secrétaire d'état à l'agriculture du 26 juin 1962, relatif aux zones de protection des madragues pour la campagne de pêche du thon de l'année 1962 (Order relative to protected zones in respect of tunny nets for the 1962 tunny fishing seasons.—26 June 1962)
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Seychelles Govt Gaz., (36) : 38-9
 S.I. No. 27 of 1962. The fisheries regulations, 1962, made under the fisheries ordinance (chapter 16).—18 June 1962
 Establishes fishing reserves. Prohibits fishing therein with any nets, and dragging any net across the seabed, except for encircling purposes.
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Norsk Hvalfangst-tid. 51 (12) : 461-6
 International quota agreements
 Text of final whale quota agreement signed in London on 5 Jun. 1962.
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- Puerto Rico University. Institute of Caribbean Studies (1962)**
Caribb. J. Sci., 2 (3) : 105-38
 Contains list of recent scientific publications for Caribbean area—incl. section on fish and fisheries—and articles incl. observations of summer 1961 in Puerto Rico.
- M
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- International Conference on Safety of Life at Sea (1960)**
 London, H.M.S.O. : 512 p.
 Final act of conference with annexes including the international convention for the safety of life at sea, signed in London, 17 June 1960
- G
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- Needham, A. E. (1961)**
Nature, Lond., 192 (4802) : 579-80
 Rate of senescence
 Cf 1908 Minnot, C. S.; 571827.

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Zool. Rec., 97 (19) : 112 p. 8-06525

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Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Coff's Harbour Creek, county of Fitzroy.—28 March 1962

Prohibits the taking of fish by nets of every description, in the specified tidal waters, from 11 Jul. 1962 to 10 Jul. 1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (42) : 1217 8-06532

Proclamation, made under the fisheries and oyster farms act, 1935, as amended, relating to portion of waters of Tweed River, county of Rous.—10 April 1962

Prohibits the taking of fish by nets of every description, in the specified tidal and inland waters, for a period of five years.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (42) : 1217 8-06533

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to the waters of Wallis Lake, county of Gloucester.—10 April 1962

Prohibits the taking of fish by nets of every description other than prawn nets prescribed by regulations 21, 25 and 139, in inland and tidal waters during the periods specified, for the years 1962–1966.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (42) : 1218 8-06534

Proclamation, made under the fisheries and oyster farms act, 1935–1960.—18 April 1962

Prohibits the taking of fish by nets of every description, in tidal waters during the period specified, for the years 1962–1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (42) : 1218 8-06535

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to the waters of Nerimbula Lake, county of Auckland.—18 April 1962

Prohibits the taking of fish by nets of every description, in the specified tidal waters, from 28 Mar. 1962 to 27 Mar. 1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (49) : 1461 8-06536

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to portion of waters of Richmond River, county of Rous.—2 May 1962

Prohibits fishing with baited fish traps in the tidal waters during the periods specified.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (49) : 1473 8-06537

Closure notification, made under the fisheries and oyster farms act, 1935, as amended, relating to portion of the waters of Hawkesbury River, counties of Cumberland, Cook, Hunter and Westmoreland.—9 May 1962

Prohibits fishing with prawn hauling nets as prescribed by regulation 21, in the tidal and inland waters specified, from 1 Jun. 1962 to 31 May 1963.

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Closure notification, made under the fisheries and oyster farms act, 1935, as amended, relating to New South Wales tidal and inland waters.—9 May 1962

Prohibits the taking of fish by means of trawl nets of every description, in the tidal waters and during the periods specified.

New South Wales. Laws, Statutes, etc. (1962) MF
8-06539
Govt Gaz. N.S.W., (49) : 1474

Closure notification, made under the fisheries and oyster farms act, 1935, as amended, relating to a portion of the waters of Clarence River, counties of Clarence, Drake, Fitzroy and Buller.—9 May 1962

Prohibits the use of prawn hauling nets prescribed in regulation 21, in the tidal and inland waters and during the periods specified.

New South Wales, Laws, Statutes, etc. (1962) MF
8-06540
Govt Gaz. N.S.W., (49) : 1474

Closure notification, made under the fisheries and oyster farms act, 1935, as amended, relating to a portion of the waters of Hunter River, counties of Northumberland, Hunter, Gloucester, Durham and Brisbane.—9 May 1962

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Western Australia. Laws, Statutes, etc. (1961) MF
8-06541
Act No. 20 of 1961, 10² Elizabeth II., No. 20, 30 October 1961 : 8 p.

Fisheries act amendment act, 1961: an act to amend the fisheries act, 1905-1960.—30 October 1961

Various amendments in respect of returns to be furnished, as to the catch, sales, output, purchases, receipts, fishing gear used, time occupied; substitution of a new second schedule dealing with (a) marine or fluvio-marine species, (b) freshwater species, (c) crustaceans and (d) method of measurements.

Ceylon. Laws, Statutes, etc. (1962) MF
8-06542
Ceylon Govt Gaz., (13,057) Pt 1, Sect. 1 : 1071 p.

Order No. 190, made under the food control act, No. 25 of 1950.—30 April 1962

A scheme of rationing of dried fish (all varieties) by means of ration books and token cards shall be in force as from 1 May 1962.

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Resolución ejecutiva No. 78 de 22 de marzo de 1962, por la que se fija la cuantía de unas exenciones del impuesto sobre la renta, y se califican como básicas unas industrias (Executive resolution No. 78 fixing the amount of certain income tax exemptions and classifying some industries as basic.—22 March 1962)

Tax exemptions for river and sea fishing for human and animal consumption and industrial purposes. These are classed as basic industries.

Finland. Laws, Statutes, etc. (1961)

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Finl. FörfattnSaml., (332) : 603-21

Statsrådets beslut N:o 332 angående ändring av statsrådets beslut om licensfri import.—22 juni 1961 (Order No. 332, amending the order on duty-free imports.—22 June 1961)

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Dritte Durchführungsbestimmung zum Fischereigesetz.—Ausgabe von Angelberechtigungsscheinen.—Vom 3. Mai 1962 (Third order giving effect to the fisheries act.—Issue of fishing permits.—3 May 1962)

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WMO. Executive Committee. Fourteenth Session, Geneva (1962) 8-07018
Geneva, EC-XIV/Doc. 109, mimeo, 3 p.

Report of the Committee on Technical Questions to Plenary on item 5.10—Oceanography and maritime meteorology—submitted by the chairman of the Committee on Technical Questions

Do 61-367me.

M

WMO. Executive Committee. Fourteenth Session, Geneva (1962) 8-07019
 Geneva, EC-XIV/Doc. 134, mimeo, 3 p.

Report of the Committee on Technical Questions to Plenary on item 5.9—
 World-wide warning service of seismic sea waves—submitted by the chairman
 of the Committee on Technical Questions

Do 61-367me.

MG

Ershov, V. O. (Program for Scientific Translations, Jerusalem, 8-07020
 Transl.) (1961).

PST Cat. No. 94 : 478 p.

Parasitology and invasive diseases of livestock

En 1956, Ershov, V. O. Book deals in detail with symptomatology,
 pathogenesis and diagnosis of various parasitic diseases, will be of great use
 to research workers in marine laboratories. Available from Program for
 Scientific Translations, Jerusalem.

MG

SCAR (ICSU) (1960) 8-07021
S.C.A.R. Bull., (4) : 47-57

Co 8-07040. Notes on new programs of member countries, 1959-60;
 supplements list of scientific stations.

MG

SCAR (ICSU) (1961) 8-07022
S.C.A.R. Bull., (7) : 76-102

Do 60-297me. Refers to SCAR activities in relation to IIOE, register of
 scientists, amendments to list of recommended scientific investigations;
 appendix gives assessment of progress in research, 1959/60, with special
 sections and recommendations on oceanography and biology.

MG

EAMFRO (1962) 8-07023
Rep. E. Afr. Mar. Fish. Res. Org., 1961 : 14 p.

Lists staff and publications and gives general account of work of the
 organization for the year 1961. Incl. brief notes on research undertaken by
 staff. Lists papers proposed for publication during the year.

MG

SCAR (ICSU) (1962) 8-07024
S.C.A.R. Bull., (10) : 132-53

Do 61-293me. Reports fifth meeting of SCAR held at Wellington 9-14
 Oct. 1961; annex gives reports of working groups incl. agenda and detailed
 SCAR program in biology (especially seals) and conservation problems;
 reviews progress and programs in oceanography, and announces formation
 of permanent working group of oceanography, incl. a marine biologist.

GENERAL

WMO. Executive Committee. Fourteenth Session, Geneva MG
(1962) 8-07025

Geneva, EC-XIV/Doc. 48, annex 1, mimeo, 10 p.

Interim report. Commission for Maritime Meteorology working group on a world-wide network of surface and upper air sea stations

Do 61-367me.

WMO. Executive Committee. Fourteenth Session, Geneva MG
(1962) 8-07026

Geneva, EC-XIV/Doc. 48, mimeo, 7 p.

Report by the president of CMM—submitted by the president of CMM

Do 61-367me.

WMO. Executive Committee. Fourteenth Session, Geneva MG
(1962) 8-07027

Geneva, EC-XIV/Doc. 38, mimeo, 4 p.

Report of the president of the Commission for Climatology

Do 61-367me.

WMO. Executive Committee. Fourteenth Session, Geneva MG
(1962) 8-07028

Geneva, EC-XIV/Doc. 24, Add. 1, mimeo, 1 p.

International geophysical year, international geophysical co-operation and data for research. Closing of IGY meteorological data centre—submitted by the secretary-general

Do 61-367me.

Borisov, P. G. (1960) MF
Moskva, Izd-vo Vyshaia Shkola, 197 8-07029

Iz istorii nauchno-promyslovykh ikhtiologicheskikh issledovani na morskikh i presnykh vodoemakh SSSR (From the history of fishery and ichthyological investigations conducted in the seas and fresh water of the USSR, Moscow, 1960)

Klykov, A. A. (1961) MF
Vopr. Ikhtiolog., 1 (20) : 590 8-07030

Retsenziia na knigu P. G. Borisova "Iz istorii nauchno-promyslovykh ikhtiologicheskikh issledovani na morskikh i presnykh vodoemakh SSSR" (Review of the book: From the history of fishery and ichthyological investigations conducted in the seas and fresh water of the USSR, Moscow, 1960, by P. G. Borisov)

Re 8-07029.

- Heen, E. & R. Kreuzer** (Ed.) (1962) MF
8-07031
 London, Fishing News, Ltd. : 447 p.
 Fish in nutrition

Do 61-099me. Contains texts of paper and discussion, incl. 8-07001, 8-07032 8-07207 and 8-07261.

- Kesteven, G. L.** (1962) MF
8-07032
In 8-07031 : 9-20
 World aquatic biomass—Its future abundance

- Palmer, R. S.** (Ed.) (1962) MF
8-07033
 London, Yale University Press, 567 p.
 Handbook of North American birds. 1. Loons through flamingos

First of a six-volume series. Ill. methods of measurement and the topography of the body surface. The systematic treatment includes for each sp. detailed description of plumage, points for field identification, and the characteristics of voice; habitat, range and migration (with a statement of 'banding status'); reproductive behaviour, eggs, young and survival data; general habits and food.

- Thomson, L.** (1962) MF
8-07034
Nature, Lond., 196 (4855) : 610
 Birds of North America
 Re 8-07033.

- Nelson, P. R. & C. F. Lee** (1962) MF
8-07035
 U.A.R. Ministry of Supply, General Organization for Aquatic Resources, (n.p.)
 The fisheries of Egypt. A report of a survey with recommendations for future development

- Ellis, D. V.** (1961) MF
8-07036
J. Fish. Res. Bd Can., 18 (6) : 1159-66
 Diving and photographic techniques for observing and recording salmon activities

Describes techniques developed for underwater observations and photographic recording of salmon behaviour.

- Passano, L. M.** (1962) MF
8-07037
Quart. Rev. Biol., 37 (1) : 51
 A biology of Crustacea. Aspect of zoology series
 Re 61-08388.

GENERAL

Bychowsky, B. E. (P. C. Oustinoff Transl.) (1961)*
Washington, AIBS, 627 p.
Monogenetic trematodes, their systematics and phylogeny

MF
8-07038

Stunkard, H. W. (1962)
Quart. Rev. Biol., 37 (1) : 63-5
Monogenetic trematodes, their systematics and phylogeny
Re 8-07038.

MF
8-07039

SCAR (ICSU) (1959)
S.C.A.R. Bull., (3) : 589-608

MF
8-07040

Co 8-07005. Reports the third meeting of SCAR held in Canberra, 2-6 Mar. 1959, at which country and international research programs were reviewed; gives texts of recommendations incl. one on hydrographic charts; announces appointment of M. M. Somov (USSR) as reporter on physical and biological oceanography; discusses relations with WMO and SCOR; gives resolutions of working groups on biology (concerning marine biology as part of oceanography, symposia, conservation of flora and fauna, formation of register of specialists in taxonomy of antarctic forms, formation of data centre) and in meteorology and oceanography. Revises list of recommended scientific investigations, giving detailed proposals for physical and biological oceanography. Supplements list of stations given in 8-07005. Reports symposium on antarctic meteorology, Melbourne, 1959, one session of which dealt with interaction of atmosphere and Antarctic Ocean.

SCAR (ICSU) (1961)
S.C.A.R. Bull., (8) : 103-15

MF
8-07041

Co 8-07022. Do 60-297me. Gives synopsis of views of national committees on proposals by 60-297me, reported in 8-07022 concerning conservation of nature, and suggests measures of protecting wild populations; summarizes national legislation in this connection; gives draft of a leaflet, and a series of definitions of terms; gives series of principles for regulating authorization for collection of animals and plants, incl. taking for food, specimens, zoos, and commercial exploitation. Texts of recommended scientific investigations, as accepted by 60-297me and now ratified by national committees. List of stations and transport 1960-1961.

SCAR (ICSU) (1961)
S.C.A.R. Bull., (9) : 116-31

MF
8-07042

Ci 8-07455. Lists stations occupied 1961 winter. Lists exchange of foreign observers 1960-61. Contains notes and review of 8-07455, which is in two parts—life sciences and physical sciences, and incl. references to freshwater and marine algae, whales, seals, fish, water budget, oceanography.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

U.S. Army Engineer Districts Portland and Walla Walla Corps of Engineers (1960)

MF
8-07043

Annu. Fish. Pass. Rep. Bonneville, 53 p.

Co 586786.

U.S. Army Engineer Districts Portland and Walla Walla Corps of Engineers (1959)

MF
8-07044

Annu. Fish. Pass. Rep. Bonneville, 44 p.

Co 8-07043.

Mohr, H. & R. Steinberg (1960)

MF
8-07045

Prot. FischTech., 7 (31) : 114-20

Über ein neues Tauchboot und seine Verwendungsmöglichkeiten für fischereiliche Untersuchungen (On a new bathyscaph and its application for fisheries investigations)

Reviews literature and gives technical description.

U.N. Conference on the Application of science and technology for the benefit of the less developed areas (1962)

MF
8-07046

U.N., E/CONF. 39/GR. 69 (C), mimeo, 14 p.

Agenda item: C.8—C.8.1—C.8.2—Fishery resources and production marine and inland fisheries. Report of the Conference secretary-general

Do 61-453me. Essay review of papers contributed to the meeting, with supplementary material as introduction to this item of the agenda. Papers considered are: 8-07008-10, 8-07050-1, 8-07189-203, 8-07211-5, 8-07218-9, 8-07282-3, 8-07343-4, and 8-07360.

Dawes, B. (Ed.) (1963)*

MF
8-07047

London, Academic Press, 360 p.

Advances in parasitology

Contains 8-07284.

Chang, T.-S. (1959)*

F
8-07048

Curr. Sci., (28) : 188-9

Hydrobiology serves fresh-water fishery in New China

BSEA 5 (7) 3687.

Kostomarov, B. (Thierbach, T., Transl.) (1961)

F
8-07049

Berlin, Deutscher Landwirtschaftsverlag, 375 p.

Die Fischzucht (Fish breeding)

De 1955, Kostomarov, B.

GENERAL

de Menezes, R. S. (1962) F
8-07050
U.N., E/CONF. 39/C/306

Activities of the Pisciculture Division (PD) of the National Department of Drought-Relief Works (DNOCS) in one of the most backward regions of the world, the Brazilian northeast

Do 61-453me.

Hickling, C. F. (1962) F
8-07051
U.N., E/CONF. 39/C/32
Inland fisheries

Do 61-453me.

Pennak, R. W. (1962) F
8-07052
New York, The Ronald Press Company, 769 p.
Fresh-water invertebrates of the United States

Covers the free-living fauna including aquatic insects, with emphasis on natural history, ecology and taxonomy.

WMO. Executive Committee. Fourteenth Session, Geneva F
8-07053
(1962)
Geneva, EC-XIV/Doc. 45, mimeo, 4 p.

Report by the president of the Commission for Hydrological Meteorology—submitted by the president of CHM

Do 61-367me.

WMO. Executive Committee. Fourteenth Session, Geneva F
8-07054
(1962)
Geneva, ED-XIV/Doc. 70, add. 1, mimeo, 2 p.

Relations with the United Nations and other international organizations. Draft working arrangements with the Danube Commission—submitted by the secretary-general

Do 61-367me.

WMO. Executive Committee. Fourteenth Session, Geneva F
8-07055
(1962)
Geneva, EC-XIV/Doc. 70, mimeo, 3 p.

Relations with the United Nations and other international organizations. Proposed working arrangements with the Danube Commission—submitted by the secretary-general

Do 61-367me.

Reichenbach-Klinke, H.-H. (1961)*

F
8-07056

Stuttgart, Gustav Fischer Verlag, 100 p.

Krankheiten der Amphibien (Diseases of amphibians)

Czechoslovakia. Československá Akademie Zemědělských Věd
(1962)

G
8-07057

Prague, Czechoslovak Academy of Sciences: 274 p.

Advances in biological sciences. Slovy

Papers giving a 10-year review of work of Czechoslovak scientists on 10th anniversary of incorporation of biological institutes in the new academy. Contains 8-07181.

WMO. Executive Committee. Fourteenth Session, Geneva
(1962)

G
8-07058

Geneva, XIV/Doc. 32, mimeo, 36 p.

Amendments to the technical regulations—submitted by the secretary-general

Do 61-367me. Appends proposed amendments to the technical regulations under chapters: Proposed amendments to the technical regulations; Semi-automatic meteorological observing station; Meteorological codes; Meteorological telecommunications; Synoptic and forecasting practices; Climatological practices; Meteorological service for shipping; Values of some physical functions and constants used in meteorology; International barometer convention; and values of some physical functions and constants used in meteorology.

WMO. Executive Committee. Fourteenth Session, Geneva
(1962)

G
8-07059

Geneva, XIV/Doc. 54, mimeo, 11 p.

Final report of the Executive Committee working group on world-wide network of meteorological stations—submitted by the chairman of the working group

Do 61-367me.

WMO. Executive Committee. Fourteenth Session, Geneva
(1962)

G
8-07060

Geneva, EC-XIV/Doc. 53, mimeo, 5 p.

Report by the president of the Commission for Instruments and Methods of Observations

Do 61-367me.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

M

Anon. (Program for Scientific Translations, Jerusalem, Transl.) 8-07061
(1961)

PST Cat. No. 1

Geographic and oceanographic observations in the Antarctic. Six articles arranged in symposium form: 1. New data on the bottom relief and the sediments of east Antarctic seas. 2. Geographical observations in an Antarctic 'oasis'. 3. Geographical observations in the Antarctic. 4. Cold wasteland in the Antarctic continent. 5. Bottom relief and sediments of the southern part of the Indian Ocean (two articles)

These articles comprise a report of some of the latest Russian advances on the relief of ocean bottoms in the Antarctic, and certain geographical observations conducted by Russian Antarctic expeditions between 1955 and 1958. Available from Program for Scientific Translations, Jerusalem.

M

Herlinveaux, R. H. & J. P. Tully (1961) 8-07062
J. Fish. Res. Bd Can., 18 (6) : 1027-71

Some oceanographic features of Juan de Fuca Strait

The distribution and structure of dissolved oxygen, temperature and density and their seasonal and tidal variations are summarized, and related to the tidal and estuarine mechanisms.

M

Tabata, S. (1961) 8-07063
J. Fish. Res. Bd Can., 18 (6) : 1073-124

Temporal changes of salinity, temperature, and dissolved oxygen content of the water at station 'P' in the northeast Pacific Ocean, and some of their factors

Oceanographic data collected at ocean weather station 'P' (Lat. 50° N, Long. 145° W) during the two years between Aug. 1956 and Jul. 1958 are presented and probable factors influencing the water properties are discussed and explanations are given to account for these variations.

M

Sasaki, T. et al. (1962) 8-07064
Sci. Pap. Inst. phys. chem. Res., Tokyo, 56 (1) : 69-76

Telemetering of oceanographic observation on current meter

As first step of telemetering by radio, instrument for measuring velocity and direction of current has been devised with which successful results are obtained.

M

Schemainda, R. (1960) 8-07065
Fischereiforsch., 3 (4) : 19-21

Zur rezenten Aussüßung der Ostsee (On the recent sweetening of the Baltic Sea)

Reviews literature as to hydrographic peculiarities and their relationship to fish populations and production.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Ranke, W. (1961)

M
8-07066

Fischereiforsch., 4 (5) : 13-6

Hydrographische Untersuchungen im Seegebiet westliche Barentssee—Bäreninsel—Spitzbergen 1960/1961 (Hydrographical investigations in the area of the western Barents Sea—Bear Island—Spitzbergen during 1960/61)

Describes thermal conditions.

Schemainda, R. (1961)

M
8-07067

Fischereiforsch., 4 (4) : 16-9

Hydrographische Bedingungen auf den Fangplätzen der Nordsee von Mai bis Oktober 1960 (Hydrographical conditions in the catch area of the North Sea from May to October 1960)

Gives a synoptical account and states that locally working tide currents are to be made responsible for the establishment of hydrographic elements and their horizontal and vertical structure.

Peloquin, R. A. (1961)*

M
8-07068

Informal oceanogr. Manusc. U. S. hydrogr. Off., (18) : 45 p.

Implementation of an airborne oceanographic platform

Paccagnini, R. & A. Casellas (1961)*

M
8-07069

Contr. Inst. antárt. argent., (64) : 12 p.

Estudios y resultados preliminares sobre trabajos oceanográficos en el area del mar de Weddel (Studies and preliminary results on oceanographic research in the area of the Weddell Sea)

Blackburn, M. (1962)

M
8-07070

Spec. Sci. Rep. U.S. Fish Wildl. Serv., Fish., (404) : 28 p.

An oceanographic study of the Gulf of Tehuantepec

Topography and climatology of region; Previous oceanographic information: mean surface temperature; mean surface current, mean depth of mixed layer, mean standing crop of zooplankton, data from expedition EASTROPIC; Observations on cruise TO-58-1, expedition SCOT (May and Jun. 1958); Observations on cruise TO-58-2 (Nov. 1958); Observations on cruise TO-59-1 (Jan. and Feb. 1959); Observations on cruise TO-59-2 (Sep. 1959).

Terada, K. & H. Fuchi (1960)

M
8-07071

Gakujutsu geppo, August, 1960 : 283-290

(Summary result of deep-sea observation by 'Ryo Fu-Maru'). Ni

Lavoie, R. L. & C. J. Wiederanders (1960)*

M
8-07072

Sci. Rep. Hawaii Inst. Geophys., (1)

Objective wind forecasting over the tropical Pacific

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

Wilson, B. W. (1960) M
8-07073
Civil Eng. S. Africa, July 1960 : 143-4
Bespreking. Discussion. The troubled waters of Table Bay Harbour

Re 8-06058. Issued also as: *Contr. Oceanogr. Met. A, and M. Coll. Tex.*, 1960-1961, (154).

Pickard, G. L. (1961) MF
8-07074
J. Fish. Res. Bd Can., 18 (6) : 907-99
Oceanographic features of inlets in the British Columbia mainland coast

Detailed study of the physical and chemical oceanography which notes that though the inlets of the mainland coast are morphologically fjords, few possess sill depths less than 15 metres, and very few, if any, are sufficiently stagnant to exhibit anaerobic conditions.

Chesapeake Bay Institute. The Johns Hopkins University MF
8-07075
(1962)
Data Rep. Chesapeake Bay Inst., 33 : 13 p.
Bay cruise 14. 23 July-26 July 1957

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 23-26 Jul. 1957.

Chesapeake Bay Institute. The Johns Hopkins University MF
8-07076
(1962)
Data Rep. Chesapeake Bay Inst., 34 : 41 p.
Bay cruise 15. 11 September-20 September 1957

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 11-20 Sep. 1957.

Chesapeake Bay Institute. The Johns Hopkins University MF
8-07077
(1962)
Data Rep. Chesapeake Bay Inst., 35 : 25 p.
Bay cruise 16. 23 January-7 February, 1958

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 23 Jan.-7 Feb. 1958.

Chesapeake Bay Institute. The Johns Hopkins University MF
8-07078
(1962)
Data Rep. Chesapeake Bay Inst., 36 : 53 p.
Bay cruise 17. 22 April-13 May 1958

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 22 Apr. to 13 May 1958.

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- MF
8-07079
- Chesapeake Bay Institute. The Johns Hopkins University**
(1962)
Data Rep. Chesapeake Bay Inst., 38 : 39 p.
Bay cruise 18. 6 August–22 August 1958
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 6 to 22 Aug. 1958.
- MF
8-07080
- Chesapeake Bay Institute. The Johns Hopkins University**
(1962)
Data Rep. Chesapeake Bay Inst., 39 : 13 p.
Bay cruise 19. 4 November–11 December 1958
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 4 Nov. to 11 Dec. 1958.
- MF
8-07081
- Chesapeake Bay Institute. The Johns Hopkins University**
(1962)
Data Rep. Chesapeake Bay Inst., 40 : 49 p.
Bay cruise 20. 23 March–19 April 1959
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 23 Mar. to 19 Apr. 1959.
- MF
8-07082
- Chesapeake Bay Institute. The Johns Hopkins University**
(1962)
Data Rep. Chesapeake Bay Inst., 41 : 54 p.
Bay cruise 21. 6 July–17 July 1959
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 6 to 17 Jul. 1959.
- MF
8-07083
- Chesapeake Bay Institute. The Johns Hopkins University**
(1962)
Data Rep. Chesapeake Bay Inst., 42 : 38 p.
Bay cruise 22. 3 November–11 December 1959
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 3 Nov. to 11 Dec. 1959.
- MF
8-07084
- Chesapeake Bay Institute. The Johns Hopkins University**
(1962)
Data Rep. Chesapeake Bay Inst., 43 : 39 p.
Bay cruise 23. 27 April–17 May 1960
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 27 Apr. to 17 May 1960.

- Chesapeake Bay Institute. The Johns Hopkins University** MF
(1962) 8-07085
Data Rep. Chesapeake Bay Inst., 44 : 46 p.
Bay cruise 24. 22 August–9 September 1960

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 22 Aug. to 9 Sep. 1960.

- Chesapeake Bay Institute. The Johns Hopkins University** MF
(1962) 8-07086
Data Rep. Chesapeake Bay Inst., 45 : 33 p.
Bay cruise 25. 22 November–5 December 1960

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 22 Nov. to 5 Dec. 1960.

- Chesapeake Bay Institute. The Johns Hopkins University** MF
(1962) 8-07087
Data Rep. Chesapeake Bay Inst., 46 : 22 p.
Bay cruise 26. 27 February–7 April 1961

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 27 Feb. to 7 Apr. 1961.

- Chesapeake Bay Institute. The Johns Hopkins University** MF
(1962) 8-07088
Data Rep. Chesapeake Bay Inst., 47 : 32 p.
Bay cruise 27. 19 July–1 August 1961

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 19 Jul. to 1 Aug. 1961.

- Wagner, G. (1961)** F
Z. Fisch., 10 (1/3) : 5–19 8-07089

Temperaturen und Sauerstoff im Grossen Stechlinsee und Sacrower See. Eine Gegenüberstellung der Jahre 1958 und 1959 (Temperatures and O₂-contents in the Grosse Stechlin Lake and the Lake of Sacrow. A comparison of the years 1958 and 1959). En Ru

Hydrographical record.

- ECE (UN) (1962)** F
E/ECE/496. Water Poll./Sem. 4, mimeo 8-07090
Travelling seminar on water pollution on the Rhine. Report by the executive secretary

Do 61-371me.

F

Hrbáček, J. (1962)

8-07091

Rozor. čsl. Akad. Věd (mat. přír.), 72 (10) : 114 p.

Species composition and the amount of the zooplankton in relation to the fish stock

Literature review, and account of extensive experiments in two Czechoslovakian ponds and two backwaters of the Elbe, of different productivities, and involving poisoning of fish in one of the backwaters, and comparative studies of physico-chemical characteristics, and qualitative and quantitative analyses of phyto- and zooplankton and benthos. Rather little information is given about the fish stocks themselves, mainly carp, pike, tench, bream, perch or roach. Data tabulated in detail.

F

Patalas, K. (1960)

8-07092

Roczn. Nauk rol. (B), 77 (1) : 105-222

Stosunki termiczne i tlenowe oraz przezroczystość wody w 44 jeziorach okolic Węgorzewa (Thermal and oxygen conditions and transparency of water in 44 lakes of Węgorzewo district). *Pl Ru En*

Mainly concerned with primary production.

F

Patalas, K. (1960)

8-07093

Roczn. Nauk rol. (B), 77 (1) : 223-42

Mieszanie wody jako czynnik określający intensywność krążenia materii w różnych morfologicznie jeziorach okolic Węgorzewa (Mixing of water as the factor defining intensity of food materials circulation in morphologically different lakes of Węgorzewo district). *Pl Ru En*

Principally concerned with fertilizing mechanisms.

F

Patalas, K. (1960)

8-07094

Roczn. Nauk rol. (B), 77 (1) : 243-97

Charakterystyka składu chemicznego wody 48 jezior okolic Węgorzewa (Characteristics of chemical composition of water in forty-eight lakes of Węgorzewo district). *Pl Ru En*

Part of a complex study on fishery management. Aims to determine the chemical contents of water in 48 lakes.

FG

U.S. Department of Health, Education & Welfare (1962)

8-07095

Radiol. Hlth Data, 3 (10) : 379-424

Contains section on 'water' tabulating data for the month Apr. 1962 for radioactivity in raw surface waters; also global integrals of fallout, etc.

PLANKTON

M

Wittenberg, J. B. (1960)

8-07096

J. exp. Biol., 37 : 698-705

The source of carbon monoxide in the float of the Portuguese man-of-war, *Physalia physalis* L.

PLANKTON

- Oncescu, M. & O. Serbanescu** (1963) M
8-07097
Stud. Cercet. Fiziol., 14 : 133-41
 The β radioactivity of the zooplankton of the Black Sea

NSA 17 (19) 31843. Measurements of β activity, made immediately after the samples are collected, show a relatively intense radioactivity.

- Parsons, T. R., K. Stephens & J. D. H. Strickland** (1961) M
8-07098
J. Fish. Res. Bd Can., 18 (6) : 1001-16
 On the chemical composition of eleven species of marine phytoplankters

Chemical analyses of 11 species of marine planktonic representatives of the Chlorophyceae, Chrysophyceae, Bacillariophyceae, Dinophyceae and Myxophyceae.

- Parsons, T. R.** (1961) M
8-07099
J. Fish. Res. Bd Can., 18 (6) : 1017-25
 On the pigment composition of eleven species of marine phytoplankters

Representatives of the Chlorophyceae, Chrysophyceae, Bacillariophyceae, Dinophyceae and Myxophyceae were grown under similar chemical and physical conditions and their pigment content was determined during the exponential phase of growth. Particular attention was paid to the presence of chlorophyll as well as to the identity of certain carotenoids.

- Aron, W.** (1962) M
8-07100
J. Fish. Res. Bd Can., 19 (2) : 271-314
 The distribution of animals in the eastern North Pacific and its relationship to physical and chemical conditions

Sampling with the Isaacs-Kidd midwater trawl yields good quantities of large and easily-identified animals that can be used as 'indicator organisms' to identify water masses in the north-eastern Pacific Ocean.

- Mansueti, R. J.** (1962) M
8-07101
Quart. Rev. Biol., 37 (1) : 52-3

Two new Pacific chaetognaths. Their distribution and relation to allied species

Re 8-03154.

- Dingle, H.** (1962) M
8-07102
Amer. Nat., 96 (888) : 151-60

The occurrence and ecological significance of color responses in some marine Crustacea

Observations on specific 'dances' in response to red and blue light in planktonic copepods, decapods, stomatopods and others.

- Lindner, A.** (1960) M
8-07103
Fischereiforsch., 3 (5/6) : 31-7
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 Describes spp. and relates occurrence to hydrographic particularities.
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Vopr. Ikhtiol., 1 (20) : 583-9
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 Studies effects of variable intensity and duration of both lighting and shade upon the character of the spine response.
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 Force exerted by a single cilium of *Mytilus edulis* I
 Deals with force which a single molluscan cilium can produce during its effective stroke. Describes methods used.
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 Neuromuscular activity in the swimming sea anemone, *Stomphia coccinea* (Müller)
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J. exp. Biol., 37 : 732-52
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J. exp. Biol., 37 : 753-74
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Describes apparatus suitable for transmitting hydrodynamic sound waves and tests the function of statocyst in hearing.

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- Josephson, R. K.** (1961) M
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 Retinal orientation and the discrimination of polarized light by octopuses

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J. exp. Biol., 39 : 71-88
 Peripheral reflex inhibition in the claw of the crab, *Carcinus maenas* (L.)

Describes methods and results of experiments carried out with *Carcinus maenas* and *Astacus pallipes*.

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- Bush, B. M. H.** (1962)
J. exp. Biol., 39 : 89-106
 Proprioceptive reflexes in the legs of *Carcinus maenas* (L.)

Reflex responses of the motor and inhibitor axons of the four distal muscles in the thoracic limbs of *Carcinus maenas* to passive movements of the dactylus and propus in the same limb are described.

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- Harrison, F. M.** (1962)
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Experiments were carried out on the abalone, *Haliotis rufescens*, to discover some of the mechanisms involved in urine formation. Test substances were infused into the blood stream and their concentrations followed in serially taken samples of blood, pericardial fluid and urine from the right and left kidneys.

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- Alexander, R. McN.** (1962) M
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 Visco-elastic properties of the body-wall of sea anemones
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- de Silva, P. H. D. H.** (1962) M
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J. exp. Biol., 39 : 483-90
 Experiments on choice of substrata by *Spirorbis* larvae (Serpulidae)
Spirorbis borealis occurs typically on *Fucus serratus*, *S. corallinae* on *Corallina officinalis* and *S. tridentatus* on rocks and stones.
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J. exp. Biol., 39 : 557-66
 Simultaneous shape discrimination in *Octopus* after removal of the vertical lobe
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J. exp. Biol., 39 : 589-602

The effect of light on the shadow reaction of the sea urchin, *Diadema setosum* (Leske)

Reports on studies with an improved optical system and a timing device.

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Notas Estud. Inst. Biol. marit., (25) : 9 p.

Un stomatopode nouveau pour la faune portugaise et pour l'océan Atlantique, *Pseudosquilla ferussaci* (Roux) (A new stomatopod for the Portuguese fauna and Atlantic Ocean: *Pseudosquilla ferussaci* (Roux))

Geographic distribution and taxonomic description.

Menzies, R. J. (1963)

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Ann. Mag. nat. Hist. (13), 5 (55) : 402-6

A new species of monoplacophoran mollusc, *Neopilina* (*Neopilina*) *veleronis* from the slope of the Cedros Trench, Mexico

Ci 581693; 59-6260; 60-0094; 61-06446; 61-10993. Animals reported there are smaller than those previously described but nevertheless sexually mature. Contrary to preliminary report, the specimens have five and not six pairs of gills. Accordingly place in subgenus *Neopilina* rather than subgenus *Vema*.

Tunbridge, B. R. (1962)

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Fish. Tech. N.Z. Mar. Dep., (6) : 42 p.

Occurrence and distribution of the dredge oyster (*Ostrea sinuata*) in Tasman and Golden Bays

During October 1961, beds in these Bays were investigated. Oysters have been taken from both for many years but this survey was the first to examine in some detail their occurrence and distribution. The N.Z. Marine Department research vessel 'Ikaterere' was used.

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The fauna of the Ross Sea, Part 1, Ophiuroidea

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Changements de couleur morphologiques chez *Leander serratus* (Crustacé Décapode) (Changes of morphological colour in *Leander serratus* (Crustacea, Decapoda))

Preliminary note on aquarium experiments showing change in the quantity of pigments and in the quality and number of chromatophores

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Studies on sodium balance in *Gammarus duebeni* Lilljeborg and *G. pulex pulex* (L.)

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Sodium balance in *Eriocheir sinensis* (M. Edw.). The adaptation of the Crustacea to fresh water

Gives quantitative measure of the uptake and loss rates for animals adapted to external solutions of known concentration.

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Nature, Lond., (4855) : 687-8 8-07158

Gibberellin-like substances in plants

No evidence was obtained from numerous extracts of *Chlamydomonas reinhardi*, *Gonyaulax polyedra*, growing regions of *Macrocystis pyrifera*. Gibberellin-like substances are of widespread occurrence, being reported in angiosperms, gymnosperms, ferns, brown algae, and certain fungi.

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The effect of physical conditions of cultivation on the respiratory metabolism of algae

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Vopr. Ikhtiol., 1 (20) : 570-82 8-07161

O pitanii nekotorykh khishchnykh lichinok khironomid (Feeding in some predatory chironomid larvae)

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J. exp. Biol., 37 : 339–43
 The composition of the haemolymph of the larva of *Drosophila melanogaster*
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J. exp. Biol., 37 : 534–47
 The absorption of sodium ions by the crayfish, *Astacus pallipes* Lereboullet.
 2. The effect of the external anion
 Co 60-0530.
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J. exp. Biol., 37 : 548–57
 The absorption of sodium ions by the crayfish, *Astacus pallipes* Lereboullet.
 3. The effect of other cations in the external solution
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J. exp. Biol., 37 : 594–608
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 Some effects of temperature and concentration of the medium on the ionic
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J. exp. Biol., 37 : 706–18
 Some factors affecting the oxygen consumption of *Asellus*
 Studies the effect of body size, temperature and O₂ concentration on the
 O₂ consumption of *A. aquaticus*, and effect of O₂ concentration on the con-
 sumption of *A. meridianus*, a sp. not recorded in polluted streams.

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- Rao, K. P. & R. Ramachandra** (1961)
J. exp. biol., 38 : 29-34

Effect of acclimatization to high temperature on the blood chloride, free amino acids and osmotic pressure in the freshwater field crab, *Paratelphusa* sp. and the freshwater mussel *Lamellidens marginalis*

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- Padmanabhanaidu, B. & R. Ramamurthy** (1961)
J. exp. Biol., 38 : 35-42

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The influence of water-loading and low temperature on certain functional aspects of the crayfish antennal gland

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J. exp. Biol., 38 : 501-20

Studies on salt and water balance in caddis larvae (Trichoptera). 1. Osmotic and ionic regulation of body fluids in *Limnephilus affinis* Curtis

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Studies on salt and water balance in caddis larvae (Trichoptera). 2. Osmotic and ionic regulation of body fluids in *Limnephilus stigma* Curtis and *Anabolia nervosa* Leach

Co 8-07174.

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Nature, Lond., 196 (4855) : 691

A giant form of *Chlorella pyrenoidosa*

Cells in nodules in the abdominal cavity in diabetic rats are of giant size in comparison with the normal forms.

Cure, V. (1962)F
8-07177*Bull. Inst. Cerc. pisc.*, 21 (1) : 14-35

Contribuții la cunoașterea faunei de chironomide (larve) din râul Bistrița, în zona iacului de acumulare de la Bicaz, înainte și în primul an de inundare (Contribution to the study of the chironomid (larvae) fauna in the river Bistrița, in the area of the barrage lake Bicaz, a year before and after the formation). Ro Ru Fr

Discusses physiographic and hydrobiological conditions; gives information on the benthic fauna, especially of chironomids. Proposes the introduction of *Abramis brama*.

Sutcliffe, D. W. (1962)F
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The composition of haemolymph in aquatic insects

Analyses were made of haemolymph obtained from aquatic representatives of nine major orders in the Insecta.

Gál, D. (1961)F
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Das Leben der Tisza 10. Die Rhizopodenfauna der auf ungarischem Boden fliessenden oberen Strecke der Tisza im Jahre 1959/60 (The life in the Tisza River. 10. The rhizopod-fauna of the Hungarian stretch of the upper Tisza River during 1959/60)

Describes hydrological and physiographical conditions and gives an account of population according to 73 samples. CR 8-07180.

Uherkovich, G. (1961)F
8-07180*Acta Univ. Szeged (Biol.)*, 7 (1-2) : 103-20

Das Leben der Tisza. 12. Weitere synoptische Beobachtungen über die Algenvegetation der Tisza (Theiss) zwischen Tiszabecs und Tiszacsege und ihrer Nebenflüsse (The life in the Tisza River. 12. Further synoptical observations on the algae vegetation of the Tisza River between Tiszabecz and Tiszacsege and their tributaries)

Describes composition of potamoplankton. CR 8-07179.

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8-07181*In* 8-07057 : 94-109

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General review of techniques, clearing and applications of culture of microorganisms with ref. to mass culture of algae.

FISHING

FISHING

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Vopr. Ikhtiol., 1 (20) : 383-90

N. Ia. Danilovskii—pervnyi issledovatel' Azovskogo rybolovstva (N. Ya. Danilevsky—the first investigator of the Azov fishery)

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Gadidov, N., St. Pircălăboiu & R. Elefteriu (1962)

Bul. Inst. Cerc. pisc., 21 (1) : 80-7

Talianul suspendat, o nouă unealtă de pescuit la litoralul marin românesc (The floating trap, a new fishing gear of the Roumanian coast). Ro Ru Fr

Describes the gear used in Black Sea, with results obtained.

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J. Fish. Res. Bd Can., 19 (2) : 321-6

Dogfish gelatin

Gives details of chemical analyses of gelatin prepared from the skin and skeleton of the Canadian Pacific coast dogfish *Squalus suckleyi*.

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Ritzhaupt, H. (1959)

Fischereiforsch., 2 (2/3) : 29-33

Die fischereiliche Situation in der mittleren und östlichen Ostsee im November 1958 (The state of fisheries in the middle and eastern Baltic in November 1958)

Reports on length frequencies and special composition of catch in certain fishing areas.

M

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Pritchard, I. (1962)

Africana, (4) : 16-7

Turtle Bay

A popular article, advocating the destructiveness of harpoon fishing and its effects on the fish fauna.

M

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Elwertowski, J. (1960)

Fischereiforsch., 3 (4) : 1-18

Biologische Grundlagen der Sprottenfischerei in der östlichen und mittleren Ostsee (Biological bases of sprat fishing industry in the eastern and middle Baltic)

Reviews basic knowledge of biology and recent investigations with a view to establishment of the most economical way of fishing.

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Fischereiforsch., 4 (4) : 20-4

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Chapman, W. M. et al. (1962)

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Ocean fishery products and their inland transport in less-developed areas: a multidisciplinary approach for delivery of protein from the sea to the inland consumer

Do 61-453me.

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U.N., E/CONF. 39/C/356

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U.N., E/CONF. 39/C/57

The fishing industry in the development of the south-west Atlantic region of Latin America: a means to combat its under-development

Do 61-453me.

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Development of Indian marine fisheries

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Do 61-453me.
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The development of sea fisheries and research of the marine resources in Peru
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Do 61-453me.
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A. niloticus n. sp. differs from other spp. of this group of fish parasites by having a gonotyl. *A. spiniceps knobus* n. sub. sp. is similar but has no gonotyl.
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Ecological study based on observations in Transylvanian rivers.

- Leonte, V. et al.** (1962) F
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Describes preparatory works, the environmental conditions and results obtained in rearing carp.

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Training, speed and stamina in trout

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Experiments carried out with *Carassius auratus* L., *Lepomis macrochirus* Rafinesque, *Lepomis cyanellus* and *Ameiurus melas* Rafinesque.

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Seasonal fishing quality provided by the natural reproduction of speckled trout in three Ontario ponds

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Comparison of inlet and outlet spawning runs of rainbow trout in Loon Lake, British Columbia

Tagging experiments on *Salmo gairdneri*; comparative statistics on size, sex ratio, survival and diel movement of spawning fish.

Northcote, T. G. (1962)
J. Fish. Res. Bd Can., 19 (2) : 201-70

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Migratory behaviour of juvenile rainbow trout, *Salmo gairdneri*, in outlet and inlet streams of Loon Lake, British Columbia

Marked differences in response to water current, shown by fish migrating into the lake from its outlet and inlet streams were studied both in the field and laboratory.

Merla, G. (1961)
Z. Fisch., 10 (1/3) : 21-8

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Bedeutung der Eintagsfliegenlarven (Ephemeroptera) im Karpfenteich (On the importance of dayfly larvae (Ephemeroptera) in the carp pond).
 En Ru

Reports on examination of intestine contents of carp and stresses nutritional importance of *Caenis* and *Cloeon* in time of food deficiency.

Maier, Ch. (1962)
Z. Fisch., 10 (1/3) : 29-68

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 — 8-07322

Untersuchungen über die Verfettung der Leber des Karpfens (*Cyprinus carpio*) (Investigations of the fatty degeneration of carp liver (*Cyprinus carpio*)). En Ru

Comprehensive picture on the anatomy of carp liver. Describes experiments carried out in the Zoological Institute of the University Erlangen. Reviews literature.

Anwand, K. (1961)
Z. Fisch., 10 (1/3) : 69-104

F
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Biometrische Untersuchungen an Karpfen aus der Teichwirtschaft Peitz (Biometrical investigations of carp in the pond farm Peitz). En Ru

Results obtained agree mostly with those obtained by other authors. Bibliography.

- Rudziński, E.** (1961) F
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Z. Fisch., 10 (1/3) : 105-35

Vergleichende Untersuchungen über den Wildkarpfen der Donau und den Teichkarpfen (Comparative investigations of the wild Danube carp and the pond carp). En Ru

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Z. Fisch., 10 (1/3) : 137-63

Die genetischen Methoden der Selektion in der Karpfenzucht (The genetical methods of selection in carp raising). En Ru

- Jászfalusi, L. & J. Páskándy** (1961) F
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- Müller, K.** (1961) F
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Z. Fisch., 10 (1/3) : 173-201

Die Biologie der Äsche (*Thymallus thymallus* L.) im Lule Älv (Schwedisch Lappland) (The biology of the grayling (*Thymallus thymallus* L.) in the Lule Älv—Swedish Lapland). En Ru

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A revision of certain *Barbus* (Pisces, Cyprinidae) from east, central and south Africa

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Bull. Inst. Cerc. Pisc., 21 (2) : 11-28

Introducerea furajelor granulate în alimentația suplimentară a crapului din crescătoriile intensive (The introduction of granulous fodder as supplementary food for carp in intensive culture). Ro Ru Fr

- Costea, E. & A. Cristian** (1962) F
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Bull. Inst. Cerc. pisc., 21 (2) : 29-42

Cercetări si experimentări privind creșterea hibrizilor rezultați din încrucișarea crapului cu carasul roșu (Investigations and experiments regarding the cross breeding of carp and gold fish). Ro Ru Fr

Rădulescu, I. & N. Suceveanu (1962)

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8-07331

Bull. Inst. Cerc. pisc., 21 (2) : 43-5

Acțiunea drojdiei de bere furajere—adăugată la hrană—asupra rezistenței la boală a crapului de cultură (The action of fodder ferments, added to food, on disease resistance in carp culture). *Ro Ru Fr*

Van Zyl, J. (1962)

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Africana, (1) : 30-1

The rainbow and the brown

Popular review of trout fishing in East and South Africa.

Anthony, S. (1962)

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8-07333

Africana, (3) : 25

Tiger

Reports on *Hydrocyon vittatus* to be found in many of the big lakes south of the Sahara.

Czeczuga, B. (1959)

F
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Roczn. Nauk rol., (B), 74 (3) : 497-508

Pokarm i przyrost wymiarów ciała (długość) sielawy (*Coregonus albula* L.) w jez. Rajgrodzkim (Feed and body increments (length) in *Coregonus albula* (L.) in lake Rajgrodzke). *Pl Ru En*

Notes selective zooplankton feeding of this species in a lake in north-eastern Poland, and gives basis for determining growth.

Einsele, W. (1961?)

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Öst. Fisch., *Suppl.* 1 (1) : 18 p.

Untersuchungen über die Atmungsphysiologie sich entwickelnder Salmonideneier; ihre Anwendung auf die Natur und auf die züchterische Technik (Investigations of the respiration physiology of developing salmonid eggs; their application in nature and in breeding techniques)

Reports on H₂O, temperature and O₂ demands of trout and white fish (*Coregonus*) eggs during the incubation period and describes technical devices for hatcheries and breeding stations.

Wiesner, E. R. (1961)

F
8-07336

Allg. Fisch.Ztg., 87 (1) : 18-21

Temperatur und Fütterung in der Forellenteichwirtschaft (Temperature and feeding in trout farms)

Discussion on economics.

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Bank, O. (1961)

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8-07337

Allg. FischZtg., 86 (17) : 536-7

Ein leistungsfähiges Gerät für die Spritzung BWS-kranker Karpfen (An efficient instrument for injecting dropsy-ill carp)

Technical description and explanation.

Nawar, G. & E. G. Yoakim (1963)

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Ann. Mag. nat. Hist. (13), 5 (55) : 385-9

A study in the fecundity of the Nile cat-fish *Clarias lazera* Valenciennes in Cuvier and Valenciennes 1840

Ci 1937, U. B. Stone; 1940, V. D. Vladikov & V. Legendre; 58-1824. Based on examination of 178 females collected from Cairo fish market which is mainly supplied from lake Mataria, during period 30 Jun. to 12 Sep. 1961. Fecundity of each determined by volumetric method. Average diameter of ova determined according to Vladikov & Legendre (1940). Generally fecundity is a function of the length of the specimen.

Cairns, J., Jr. & A. Scheier (1962)

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Notul. Nat. Acad. Philad., (353) : 12 p.

The effects of temperature and water hardness upon the toxicity of naphthenic acids to the common bluegill sunfish, *Lepomis macrochirus* Raf., and the pond snail, *Physa heterostropha* Say

Iman, A. E. & M. T. Hashem (1960)*

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Notes hydrobiol. Dep. Minist. Agric. U.A.R., (51) : 17 p.

Notes on the breeding, behaviour, embryonic and larval development, of *Tilapia zillii* Gervais

Iman, A. E. & M. T. Hashem (1960)*

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Notes hydrobiol. Dep. Minist. Agric. U.A.R., (54) : 10 p.

Spawning and development of common carp (*Cyprinus carpio*) in Egyptian ponds

Brown, W. H. (1961)*

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8-07342

Bull. Tex. Game Comm., (39) : 11 p.

The fresh-water catfishes of Texas, and how to know them

Huet, M. (1962)

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U.N., E/CONF. 39/C/402

Fish breeding in tropical regions

Do 61-453me.

Bard, J. (1962)F
8-07344

U.N., E/CONF. 39/C/290

Fish breeding techniques developed in Africa and their practical results

Do 61-453me.

Zarneki, S. et al. (1961)F
8-07345*Roczn. Nauk rol. (B)*, 78 (2) : 343-55

Przyrosty 'pośpiechów' karpia w obsadach mieszanych z przeciętnymi (Doświadczenia 2-letnie 1955 i 1956) (The increase of growth of 'quick growing' carps in groups mixed with average fry—2-year experiment in 1955 and 1956). Ru En

Selective breeding of the largest carp, and comparing their growth with that of average-size fish; positive results are indicated.

Follenius, E. (1962)F
8-07346*C.R. Acad. Sci., Paris*, 255 (25) : 3474-6

Rapports neurovasculaires et neuroglandulaires dans l'hypophyse de quelques poissons. Étude au microscope électronique (Neurovascular and neuroglandular relations in the hypophysis of some fishes. An electronic microscope study)

Preliminary note on observations on trout, perch, guppy, minnow.

Lassleben (1961)F
8-07347*Fischwirt*, 11 (6) : 184-6

Zum Alter der Laichkarpfen (On the age of carp spawners)

Niewolak, S. (1960)F
8-07348*Roczn. Nauk rol., (B)*, 76 (1) : 111-35Badania nad przedłużeniem świeżości leszcza (*Abramis brama* L.) przy użyciu chlorowodoru tetracykliny (Studies on bream (*Abramis brama* L.) keeping quality improvement by application of tetracycline hydrochloride). Pl Ru EnPreliminary studies isolated 36 strains of: *Pseudomonas*, *Achromobacter*, and *Flavobacterium*. Reaction of pure cultures to tetracycline hydrochloride was investigated by the dilution method and by application of paper disks; a minimum concentration to retard development of these bacteria was established (0.5-1 p.p.m.).**Karpińska-Waluś, B.** (1961)F
8-07349*Roczn. Nauk rol., (B)*, 77 (2) : 329-98Wzrost płoci (*Rutilus rutilus* L.) w jeziorach okolic Węgorzewa (The growth of roach (*Rutilus rutilus* L.) in lakes of Węgorzewo district). Pl Ru En

Analyses rate of growth of roach in 25 lakes.

- Zawisza, J. & H. Żurowska** (1961) F
8-07350
Roczn. Nauk rol., (B), 77 (2) : 399-453

Wzrost wzdreği (*Scardinius erythrophthamus* L.) w jeziorach okolic Węgorzewa) (The growth of rudd (*Scardinius erythrophthamus* L.) in lakes of Węgorzewo district). *Pl Ru En*

Rate of growth determined from scales using the Dahl-Lea method.

- Karpińska-Waluś, B.** (1961) F
8-07351
Roczn. Nauk rol., (B), 77 (2) : 455-91

Tempo wzrostu leszcza (*Abramis brama* L.) w jeziorach okolic Węgorzewa (The rate of growth of bream (*Abramis brama* L.) in lakes of Węgorzewo district). *Pl Ru En*

Growth of bream in 14 lakes was investigated as a part of general investigation of fish growth.

- Zawisza, J. & B. Antosiak** (1961) F
8-07352
Roczn. Nauk rol., (B), 77 (2) : 493-525

Wzrost lina (*Tinca tinca* L.) w jeziorach okolic Węgorzewa (The rate of growth of tench (*Tinca tinca* L.) in lakes of Węgorzewo district). *Pl Ru En*

A study of the age and growth from scales and length-frequency distributions.

- Zawisza, J. & B. Antosiak** (1961) F
8-07353
Roczn. Nauk rol., (B), 77 (2) : 527-48

Tempo wzrostu karasia (*Carassius carassius* L.) w jeziorach okolic Węgorzewa (The rate of growth of crucian carp (*Carassius carassius* L.) in lakes of Węgorzewo district). *Pl Ru En*

The key scale was sampled and used for age determination and back calculation of the length of the body of crucian carp. The body scale ratio is such that it permits the use of the Dahl-Lea formula without correction.

- Nagięć, M.** (1961) F
8-07354
Roczn. Nauk rol., (B), 77 (2) : 549-80

Wzrost sandacza (*Lucioperca lucioperca* L.) w jeziorach północnej Polski (The growth of pike-perch (*Lucioperca lucioperca* L.) in north Polish lakes). *Pl Ru En*

Rate of growth determined by back calculation, and because of allometric growth corrected on the basis of a curve of the Segerstrale type.

- Antosiak, B.** (1961) F
8-07355
Roczn. Nauk rol., (B), 77 (2) : 581-602

Wzrost szczupaka (*Esox lucius* L.) w jeziorach okolic Węgorzewa (The rate of growth of pike (*Esox lucius* L.) in Węgorzewo district lakes). *Pl Ru En*

Tentatively concludes that differences in growth rate are not dependent on quantity of food or population density.

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8-07356
Roczn. Nauk rol., (B), 77 (2) : 603-39
 Wzrost okonia (*Perca fluviatilis* L.) w jeziorach okolic Węgorzewa (The growth of perch (*Perca fluviatilis* L.) in lakes of Węgorzewo district). *Pl* Ru En

General study of the rate of growth by scale reading; notes that the opercular bones are not suitable for age determinations.

- Bernatowicz, S.** (1961) F
8-07357
Roczn. Nauk rol., (B), 77 (2) : 641-79
 Wpływ środowiska na populację sielawy (The influence of environmental conditions on *Coregonus albula* L. population). *Pl* Ru En

Considers the influence of: surface area, type of bottom, temperature, oxygen, vegetation and planktonic Crustacea on population in eight Polish lakes.

- Zawisca, J.** (1961) F
8-07358
Roczn. Nauk rol., (B), 77 (2) : 681-748
 Wzrost ryb w jeziorach okolic Węgorzewa (The growth of fish in lakes of Węgorzewo district). *Pl* Ru En

Detailed studies of the age and growth of 8 species.

- Freytag, G.** (1961) F
8-07359
Fischwirt., 11 (10) : 309-13
 Fische und Krebse erzeugen Unterwassergeräusche (Fish and crayfish produce underwater noises)

Describes acoustical phenomenon and the biological measuring.

MISCELLANEOUS AND AUXILIARIES

- Hammond, D. A.** (1962) M
8-07360
 U.N., E/CONF. 39/C/108
 Assessment of available stocks of useful species

Do 61-453me.

- Western Australia. Laws, Statutes, etc.** (1962) M
8-07361
Govt Gaz. W. Aust., (56) : 1869-70
 Proclamation F.D. 183/60, Ex. Co. 1412 made under the fisheries act, 1905-1961.—18 July 1962

Ci 61-02813. Prohibits the taking of fish by otter trawl nets and beam trawl nets, in the Indian Ocean waters specified, for a period of five years from 1 Aug. 1962. Repeals proclamation No. 65 of 29 Jul. 1960.

Belgium. Laws, Statutes, etc. (1962)

M
8-07362

Monit. belge, (177) : 6215-7

Loi sur la pollution des eaux de la mer par les hydrocarbures.—4 juillet 1962 (Act on the pollution on the sea by oil.—4 July 1962)

As a result of the ratification by Belgium of the International Convention for the Prevention of the Pollution of the Sea by Oil.

Belgium. Laws, Statutes, etc. (1962)

M
8-07363

Monit. belge, (177) : 6218-20

Loi relative au commerce des produits de l'agriculture, de l'horticulture et de la pêche maritime.—20 juillet 1962 (Act on trade in agricultural and horticultural produce and sea fisheries products.—20 July 1962)

Provisions of a general nature, mainly administrative. The National Horticulture and Agricultural Marketing Office shall also deal with sea fisheries products.

Belgium. Laws, Statutes, etc. (1962)

M
8-07364

Monit. belge, (179) : 6353-64

Arrêté ministériel portant réglementation de la délivrance des certificats d'origine pour des produits de l'agriculture, de l'horticulture et de la pêche maritime.—26 juillet 1962 (Ministerial order regulating the issue of certificates of origin for agricultural and horticultural produce and the products of sea fisheries.—26 July 1962)

Provisions dealing mainly with the issue of certificates of origin in respect of the various products, and indicating the competent authorities in this respect.

Belgium. Laws, Statutes, etc. (1962)

M
8-07365

Monit. belge, (190) : 6903-4

Arrêté royal fixant les titres requis du personnel enseignant des établissements d'enseignement de la pêche maritime de l'État.—26 juillet 1962 (Royal order fixing the qualifications required of teaching staffs in State establishments giving instruction in sea fishing.—26 July 1962)

Belgium. Laws, Statutes, etc. (1962)

M
8-07366

Monit. belge, (187) : 6764

Arrêté ministériel portant fixation de la rémunération à payer pour l'obtention de licences pour la recherche et la cueillette du naissain de moules pendant la période allant du 1er octobre 1962 au 30 avril 1963, sur les ouvrages de la côte et des ports du littoral.—30 juillet 1962 (Ministerial order fixing the cost of licences for gathering mussels from coast and harbour works during the period 1 October 1962 to 30 April 1963.—30 July 1962)

10 Belgian francs per month and per barrel.

M

Belgium. Laws, Statutes, etc. (1962)

8-07367

Monit. belge, (213) : 7936-7

Arrêté ministériel modifiant l'arrêté ministériel du 26 juillet 1962 portant réglementation de la délivrance des certificats d'origine pour des produits de l'agriculture, de l'horticulture et de la pêche maritime.—7 septembre 1962 (Ministerial order amending the ministerial order of 26 July 1962 regulating the issue of certificates of origin for agricultural and horticultural produce and the products of sea fisheries.—7 September 1962)

Concerns the bodies qualified to issue such certificates.

M

Canada. Laws, Statutes, etc. (1962)

8-07368

Can. Gaz. (II), (7) : 337-47

SOR/62-102. Order in council, P.C. 1962-346 relating to the international Pacific halibut fishery regulations, made under the northern Pacific halibut fishery convention act.—15 March 1962

Regulations of the International Pacific Halibut Commission adopted pursuant to the convention between Canada and the United States of America of 2 Mar. 1953. All previous regulations are superseded.

M

Canada. Laws, Statutes, etc. (1962)

8-07369

Can. Gaz. (II), (7) : 345-56

DORS/62-102. Décret C.P. 1962-346 relatif au règlement de la Commission Internationale des Pêcheries de Flétan du Pacifique, en vertu de la loi sur la convention relative à la pêche du flétan dans le Pacifique septentrional.—15 mars 1962 (SOR/62-102. Order in council P.C. 1962-346 relating to the international Pacific halibut fishery regulations, made under the northern Pacific halibut fishery convention act.—15 March 1962)

Fr 8-07368.

M

Canada. Laws, Statutes, etc. (1962)

8-07370

Can. Gaz. (II), (7) : 365-6

SOR/62-112. Order in council P.C. 1962-395 amending the life saving equipment regulations made under the Canada shipping act.—22 March 1962

Concerns exemptions from the regulations or imposition of special requirements.

M

Canada. Laws, Statutes, etc. (1962)

8-07371

Can. Gaz. (II), (7) : 375-6

DORS/62-112. Décret C.P. 1962-395 modifiant le règlement sur l'équipement de sauvetage, en vertu de la loi sur la marine marchande du Canada.—22 mars 1962 (SOR/62-112. Order in council P.C. 1962-395 amending the life saving equipment regulations made under the Canada shipping act.—22 March 1962)

Fr 8-07370.

MISCELLANEOUS AND AUXILIARIES

M
8-07372

Canada. Laws, Statutes, etc. (1962)
Can. Gaz. (II), (8) : 438-9

SOR/62-137. Order in council P.C. 1962-517 amending the lobster fishery regulations pursuant the fisheries act.—12 April 1962

Miscellaneous amendments in respect of minimum size, closed seasons and description of lobster fishing districts.

M
8-07373

Canada. Laws, Statutes, etc. (1962)
Can. Gaz. (II), (8) : 453-4

DORS/62-137. Décret C.P. 1962-517 modifiant le règlement de pêche du homard en vertu de la loi sur les pêcheries.—12 avril 1962 (SOR/62-137. Order in council P.C. 1962-517 amending the lobster fishery regulations pursuant the fisheries act.—12 April 1962)

Fr 8-07372.

M
8-07374

Canada. Laws, Statutes, etc. (1962)
Statut. Can., (10-11), Eliz. II, Chap. 23 : 75-86

Appropriation act No. 4, 1962: an act for granting to Her Majesty certain sums of money for the public service for the financial year ending the 31st March 1962.—18 April 1962

Includes appropriation for fisheries, etc.

M
8-07375

Canada. Laws, Statutes, etc. (1962)
Statut. Can., (10-11), Eliz. II, Chap. 23 : 75-86

Loi des subsides n° 4 de 1962: loi accordant à Sa Majesté certaines sommes d'argent pour le service public de l'année financière expirant le 31 mars 1962.—18 avril 1962 (Appropriation act No. 4, 1962: an act for granting to Her Majesty certain sums of money for the public service for the financial year ending the 31st March 1962.—18 April 1962)

Fr 8-07374.

M
8-07376

Canada. Laws, Statutes, etc. (1962)
Statut. Can., (10-11), Eliz. II, Chap. 24 : 87-98

Appropriation act No. 5, 1962: an act for granting to Her Majesty certain sums of money for the public service for the financial year ending the 31st March 1963.—18 April 1962

Includes appropriation for fisheries.

M
8-07377

Canada. Laws, Statutes, etc. (1962)
Statut. Can., (10-11), Eliz. II, Chap. 24 : 87-98

Loi des subsides n° 5 de 1962: loi accordant à Sa Majesté certaines sommes d'argent pour le service public de l'année financière expirant le 31 mars 1963.—18 avril 1962 (Appropriation act, No. 5, 1962: an act for granting to Her Majesty certain sums of money for the public service for the financial year ending the 31st March 1963.—18 April 1962)

Fr 8-07376.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

M

Canada. Laws, Statutes, etc. (1962)

8-07378

Can. Gaz. (II), (10) : 532-3

SOR/62-171. Order in council, P.C. 1962-677 amending the seal protection regulations made under the fisheries act.—12 May 1962

In respect of seal fishing in the Cape Dorset and Whale Cove regions.

M

Canada. Laws, Statutes, etc. (1962)

8-07379

Can. Gaz. (II), (10) : 554-5

DORS/62-171. Décret C.P. 1962-677 modifiant le règlement pour la protection des phoques en vertu de la loi sur les pêcheries.—12 mai 1962 (SOR/62-171. Order in council P.C. 1962-677 amending the seal protection regulations made under the fisheries act.—12 May 1962)

Fr 8-07378.

M

Canada. Laws, Statutes, etc. (1962)

8-07380

Can. Gaz. (II), (10) : 534-5

SOR/62-172. Order in council P.C. 1962-678, relating to the beluga protection regulations, pursuant to the fisheries act.—12 May 1962

Detailed provisions in respect of licences, bag limits, fishing methods, etc.

M

Canada. Laws, Statutes, etc. (1962)

8-07381

Can. Gaz. (II), (10) : 556-7

DORS/62-172. Décret C.P. 1962-678 relatif au règlement pour la protection du bélouga en vertu de la loi sur les pêcheries.—12 mai 1962 (SOR/62-172. Order in council P.C. 1962-678, relating to beluga protection regulations, pursuant to the fisheries act.—12 May 1962)

Fr 8-07380.

M

Canada. Laws, Statutes, etc. (1962)

8-07382

Can. Gaz. (II), (13) : 687

SOR/62-228. Order in council P.C. 1962-877 amending the Quebec fishery regulations made under the fisheries act.—20 June 1962

The fee for a cod gill-net licence is one cent per fathom in length of net covered by the licence and such fee is payable in advance.

M

Canada. Laws, Statutes, etc. (1962)

8-07383

Can. Gaz. (II), (13) : 713

DORS/62-228. Décret C.P. 1962-877 modifiant le règlement de pêche du Québec en vertu de la loi sur les pêcheries.—20 juin 1962 (SOR/62-228. Order in council P.C. 1962-877 amending the Quebec fishery regulations made under the fisheries act.—20 June 1962)

Fr 8-07382.

MISCELLANEOUS AND AUXILIARIES

M

Canada. Laws, Statutes, etc. (1962)

8-07384

Can. Gaz. (II), (13) : 688

SOR/62-229. Order in council P.C. 1962-878 amending the New Brunswick fishery regulations made under the fisheries act.—20 June 1962

In respect of mackerel and herring fishing.

M

Canada. Laws, Statutes, etc. (1962)

8-07385

Can. Gaz. (II), (13) : 714

DORS/62-229. Décret C.P. 1962-878 modifiant le règlement de pêche du Nouveau-Brunswick en vertu de la loi sur les pêcheries.—20 juin 1962 (SOR/62-229. Order in council P.C. 1962-878 amending the New Brunswick fishery regulations made under the fisheries act.—20 June 1962)

Fr 8-07384.

M

Canada. Laws, Statutes, etc. (1962)

8-07386

Can. Gaz. (II), (16) : 853

DOR/62-298. Shellfishing order pursuant to the New Brunswick fishery regulations made under the fisheries act.—23 July 1962

Shellfish areas along the coast and waters of Charlotte and Saint John counties are toxic to a degree that makes them unsafe for use as bait, food or for canning.

M

Canada. Laws, Statutes, etc. (1962)

8-07387

Can. Gaz. (II), (16) : 887

DORS/62-298. Avis sur la pêche aux coquillages, en vertu du règlement de pêche du Nouveaux-Brunswick selon la loi sur le pêcheries.—23 juillet 1962 (DOR/62-298. Shellfishing order pursuant to the New Brunswick fishery regulations made under the fisheries act.—23 July 1962)

Fr 8-07386.

M

Canada. Laws, Statutes, etc. (1962)

8-07388

Can. Gaz. (II), (15) : 783-6

SOR/62-271. Order in council P.C. 1962-1036 amending the fish inspection regulations made under the fish inspection act.—25 July 1962

Amendments respecting packing and labelling, and miscellaneous amendments of schedule B (standards of quality for boneless salt fish) and of schedule C (classes and grades of salted fish packed), for export out of Canada.

M

Canada. Laws, Statutes, etc. (1962)

8-07389

Can. Gaz. (II), (15) : 813-6

DORS/62-271. Décret C.P. 1962-1036 modifiant le règlement sur l'inspection du poisson en vertu de la loi sur l'inspection du poisson.—25 juillet 1962 (SOR/62-271. Order in council P.C. 1962-1036 amending the fish inspection regulations made under the fish inspection act.—25 July 1962)

Fr 8-07388.

M

Canada. Laws, Statutes, etc. (1962)

8-07390

Can. Gaz. (II), (15) : 787

SOR/62-272. Order in council P.C. 1962-1037 amending the lobster fishery regulations made under the fisheries act.—25 July 1962

Change of closed seasons.

M

Canada. Laws, Statutes, etc. (1962)

8-07391

Can. Gaz. (II), (15) : 817

DORS/62-272. Décret 1962-1037 modifiant le règlement de pêche du homard en vertu de la loi sur les pêcheries.—25 juillet 1962 (SOR/62-272. Order in council P.C. 1962-1037 amending the lobster fishery regulations made under the fisheries act.—25 July 1962)

Fr 8-07390.

M

Canada. Laws, Statutes, etc. (1962)

8-07392

Can. Gaz. (II), (16) : 848-52

SOR/62-297. Order in council P.C. 1962-1122 relating to ship construction assistance regulations made under the appropriation acts.—8 August 1962

Detailed regulations respecting capital subsidies for the construction of commercial and fishing vessels.

M

Canada. Laws, Statutes, etc. (1962)

8-07393

Can. Gaz. (II), (16) : 882-6

DORS/62-297. Décret C.P. 1962-1122 relatif au règlement sur l'aide à la construction de navires en vertu de la loi des subsides.—8 août 1962 (SOR/62-297. Order in council P.C. 1962-1122 relating to ship construction assistance regulations made under the appropriation acts.—8 August 1962)

Fr 8-07392.

M

Canada. Laws, Statutes, etc. (1962)

8-07394

Can. Gaz. (II), (17) : 935

SOR/62-318. Order in council P.C. 1962-1143 amending the large fishing vessel inspection regulations made under the Canada shipping act.—15 August 1962

Every wooden or steel fishing vessel over 150 tons, gross tonnage, if operating in salt water, shall be dry-docked and inspected every two years.

MISCELLANEOUS AND AUXILIARIES

Canada. Laws, Statutes, etc. (1962)

M
8-07395

Can. Gaz. (II), (17) : 977

DORS/62-318. Décret C.P. 1962-1143 modifiant le règlement sur l'inspection des grands bateaux de pêche en vertu de la loi sur la marine marchande du Canada.—15 août 1962 (SOR/62-318. Order in council P.C. 1962-1143 amending the large fishing vessel inspection regulations made under the Canada shipping act.—15 August 1962)

Fr 8-07394.

Canada. Laws, Statutes, etc. (1962)

M
8-07396

Can. Gaz. (II), (17) : 955-6

SOR/62-330. Order in council P.C. 1962-1195 relative to tariff treatment—duties reduced on certain goods made under the customs act.—24 August 1962

Such goods include frozen tuna to be processed in Canadian canneries.

Canada. Laws, Statutes, etc. (1962)

M
8-07397

Can. Gaz. (II), (17) : 998-9

DORS/62-330. Décret C.P. 1962-1195 concernant le régime tarifaire—Réduction des droits à l'égard de certaines marchandises en vertu de la loi sur les douanes.—24 août 1962 (SOR/62-330. Order in council P.C. 1962-1195 relative to tariff treatment—duties reduced on certain goods made under the customs act.—24 August 1962)

Fr 8-07396.

Prince Edward Island. Laws, Statutes, etc. (1961)

M
8-07398

Laws Pr. Edw. I., 1st and 2nd Sessions, Chapter 1 : 1-3

The appropriation act: an act for appropriating certain monies therein mentioned for the public service for the fiscal year ending 31st March, 1962, and for the first part of the year ending 31st March, 1963.—16 March 1961

Includes appropriations for fisheries.

Chile. Laws, Statutes, etc. (1962)

M
8-07399

Diario ofic. Santiago, (25.281) : 1339

Decreto No. 764 por el que se excluye a los productos de la pesca del régimen de estabilización de precios.—3 de mayo de 1962 (Decree No. 764 excluding fisheries products from the price stabilization regime.—3 May 1962)

As a result of propitious or unfavourable seasons, prices naturally tend to fluctuate. Fisheries products include shellfish.

M

Chile. Laws, Statutes, etc. (1962)

8-07400

Diario ofic., Santiago, (25.293) : 1443-4

Decreto No. 296 por el que se autoriza la extracción y comercialización del choro en las provincias que señala, por el período que señala y deroga los decretos que indica.—26 de mayo de 1962 (Decree No. 296 authorizing the capture and marketing of *Choromytilus chorus* in the provinces named and for the period specified and rescinding the decrees as stated.—26 May 1962)

Valid from 1 Jun. to 31 Jul. 1962 in all the southern provinces of Chile.

M

Chile. Laws, Statutes, etc. (1962)

8-07401

Diario ofic., Santiago, (25.293) : 1444

Decreto No. 353 por el que se suspende la prohibición de extraer ostiones en las costas de Iquique y Pisagua por el tiempo que se señala.—30 de junio de 1962 (Decree No. 353 suspending the prohibition to catch *Pecten purpuratus* on the coast off Iquique and Pisagua for the time specified.—30 June 1962)

Valid until 30 Sep. 1962.

M

Chile. Laws, Statutes, etc. (1962)

8-07402

Diario ofic., Santiago, (25.293) : 1444

Decreto No. 368 por el que se reemplaza los números 1.o y 2.o del decreto supremo número 296, de 1962.—10 de julio de 1962 (Decree No. 368 replacing articles 1 and 2 of supreme decree No. 296 of 1962.—10 July 1962)

Extends authorization for the fishing of *Choromytilus chorus* from 31 Jul. to 15 Sep. 1962.

M

Cuba. Laws, Statutes, etc. (1962)

8-07403

Gaceta ofic. Cuba, (60) : 3701

Resolución comunicando que el camarón de mar no será objeto de veda.—9 de marzo de 1962 (Resolution announcing that there is to be no closed season on sea shrimp.—9 March 1962)

Applicable to the present year only; not to be taken as creating a precedent.

M

Cuba. Laws, Statutes, etc. (1962)

8-07404

Gaceta ofic. Cuba, (60) : 3701-2

Resolución estableciendo períodos de veda (Resolution establishing a closed season.—Undated)

On rock lobster (*Panulirus argus*), from 26 Mar. to 26 Jun. 1962.

M

Cuba. Laws, Statutes, etc. (1962)

8-07405

Gaceta ofic. Cuba, (91) : 5720

Resolución estableciendo período de veda de esponjas.—3 de mayo de 1962 (Resolution establishing a closed season on sponges.—3 May 1962)

From 20 May to 30 Sep. 1962.

MISCELLANEOUS AND AUXILIARIES

M
8-07406

Cuba. Laws, Statutes, etc. (1962)
Gaceta ofic. Cuba, (127) : 8489

Resolución por la que se establece un período de veda de la especie *Macrobrachium jamaicense*.—20 de junio de 1962 (Resolution establishing a closed season on the species *Macrobrachium jamaicense*.—20 June 1962)

From 10 Jul. to 10 Sep. 1962.

M
8-07407

Cuba. Laws, Statutes, etc. (1962)
Gaceta ofic. Cuba, (127) : 8489-90

Resolución por la que se establece un período de veda para las especie *Caretta caretta*, *Eretmochelys imbricata* y *Chelonia mydas*.—20 de junio de 1962 (Resolution establishing a closed season on the species *Caretta caretta*, *Eretmochelys imbricata* and *Chelonia mydas*.—20 June 1962)

From 5 Jul. to 5 Oct. 1962.

M
8-07408

Gabon. Laws, Statutes, etc. (1962)
J. off. Rép. gabon., (17) : 594-6

Arrêté n° 653/PR-MA du 22 mai 1962 fixant le prix suivant le qualité du poisson et de certains produits marins sur les marchés de Libreville (Order No. 653/PR-MA fixing, according to quality, the price of fish and certain other sea products on the Libreville market.—22 May 1962)

Defines in detail the meaning of the terms fish and Crustacea 1st, 2nd and 3rd quality.

M
8-07409

Greece. Laws, Statutes, etc. (1962)
Ephēm. Kybern., (II), (43) : 441-2

B. Diatagma up'arith. 166 perī kanonismou alieías dia tratōn (Royal decree No. 166, regulating fishing with so-called 'trata' nets.—6 March 1962)

M
8-07410

Italy. Laws, Statutes, etc. (1962)
Gazz. uff. Repub. ital., (160), Suppl. 1 : 64-6

Decreto del presidente della repubblica n. 531 relativo alle sospensioni e riduzioni daziarie, per l'anno 1962, per alcuni prodotti.—5 giugno 1962 (Presidential decree No. 531 concerning customs suspensions and reductions for certain products for 1962.—5 June 1962)

Inter alia, customs on whale oil suspended.

M
8-07411

Italy. Laws, Statutes, etc. (1962)
Gazz. uff. Repub. ital., (160), Suppl. 1 : 67-70

Decreto del presidente della repubblica n. 532: modificazioni al regime dazionario di alcuni prodotti.—5 giugno 1962 (Presidential decree No. 532 amending the customs system affecting certain products.—5 June 1962)

Affects *inter alia* anchovies and sardines in brine.

Libya. Laws, Statutes, etc. (1962)M
8-07412*Off. Gaz., Libya, (6)*

Law No. 8 of 1962 regulating fishing.—26 April 1962

Extensive provisions respecting the establishment of a Federal Fisheries Department and its functions, the establishment of maritime fishing offices at Bengasi and Tripoli, fishing licences, fishing vessels and their inspections, fishing methods, fishermen including their social insurance, etc.

Morocco. Laws, Statutes, etc. (1962)M
8-07413*Bull. off. Emp. chérif., (2582) : 573, 591-2*

Arrêté du ministre du commerce, de l'industrie, des mines, de l'artisanat et de la marine marchande n° 230-62 du 12 avril 1962 fixant le prix de la sardine destinée à l'industrie de la conserve, à la congélation à la salaison, aux sous-produits et à l'exportation (Order No. 230-62 fixing the prices of sardines intended for the canning industry, freezing, salting, by products and export.—12 April 1962)

Morocco. Laws, Statutes, etc. (1962)M
8-07414*Bull. off. Emp. chérif., (2594) : 881, 901*

Arrêté n° 376-62 du 28 mai fixant, pour la campagne 1962-1963, les conditions d'application du dahir du 8 janvier 1957, conférant la garantie partielle de l'état aux avances bancaires consenties sur les conserves de sardines (Order No. 376-62 fixing for the 1962-63 season the conditions for application of the dahir of 8 January 1957 granting a partial state guarantee for bank loans on sardine preserves.—28 May 1962)

Fixes maximum amount of loans that can be guaranteed.

Morocco. Laws, Statutes, etc. (1962)M
8-07415*Bull. off. Emp. chérif., (2594) : 878-9, 898*

Dahir n° 1-59-064 du 30 juin 1962 modifiant l'article 2 de l'annexe III du dahir du 31 mars 1919 relatif à l'étendue des eaux territoriales marocaines au point de vue de la pêche et abrogeant l'article premier du dahir du 25 mars 1922 portant règlement sur l'exercice de la pêche en flotte (Dahir No. 1-59-064, amending art. 2 of annex III to the dahir of 31 March 1919 relating to the extent of Moroccan territorial waters in respect of fishing, and abrogating art. 1 of the dahir of 25 March 1922 regulating the exercise of fleet fishing.—30 June 1962)

Establishes the width of the territorial sea, in respect of fisheries, at 12 miles on the Atlantic and Mediterranean coasts and at 6 miles in the strait of Gibraltar.

Morocco. Laws, Statutes, etc. (1962) M
8-07416
Bull. off. Emp. chérif., (2594) : 882, 901

Arrêté n° 387-62 du 30 juin 1962 complétant l'arrêté n° 230-62 du 12 avril 1962 fixant le prix de la sardine destinée à l'industrie de la conserve, à la congélation, à la salaison, aux sous-produits et à l'exportation (Order No. 387-62 supplementing order No. 230-62 of 12 April 1962 fixing the price of sardines of the canning industry, freezing, salting, by-products and export.—30 June 1962)

In respect of Al Hoceima Harbour.

Netherlands. Laws, Statutes, etc. (1962) M
8-07417
Staatsblad, Den Haag, Text 167 : 400-1

Wet van 3 mei 1962, houdende wijziging van de Zuiderzeesteunwet (Act amending the act on assistance relative to the Zuiderzee.—3 May 1962)

Amends act Stbl. 290/1925 in respect of subsidies to elderly persons who practised fishing in the IJsselmeer before its transformation.

Netherlands. Laws, Statutes, etc. (1962) M
8-07418
Ned. Staatscourant, (92) : 3

Nr. Vi. 495. Ontheffing van enige bepalingen van het bijzonder visserij-reglement VII voor de visserij in de Geul.—10 mei 1962 (Order No. Vi. 495 exempting fishing in the river Geul from the application of certain provisions of the special regulations VII on fishing.—10 May 1962)

Authorized fishing with hooks, etc., in a certain part of the river Geul during the period 1 Oct. 1962-15 Mar. 1963.

Netherlands. Laws, Statutes, etc. (1962) M
8-07419
Ned. Staatscourant, (107) : 6

Nr. J 1150. Maaswijde zeevisnetten 1962.—1 juni 1962 (Order No. J 1150 relative to the dimension of meshes of sea-fishing nets.—1 June 1962)

In respect of drag-nets.

Netherlands. Laws, Statutes, etc. (1962) M
8-07420
Staatsblad, Den Haag, Text 228 : 567

Besluit van 6 juni 1962, houdende nadere wijziging van het bijzonder visserijreglement voor de afgesloten Zuiderzee (Decree further amending the special regulations on fishing in the landbound Zuiderzee.—6 June 1962)

Amends special regulations, Stbl. 315/1932, as last amended in Stbl. 380/1959. Concerns net sizes and the prohibition to use certain nets during specified periods.

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- M
8-07421
- New Zealand. Laws, Statutes, etc. (1961)**
Statut. Rules, 1961/123 : 8 p.
 The whaling industry regulations 1961.—20 September 1961
- Detailed regulations replacing the whaling industry regulations 1949. Concern licensing, minimum sizes, open season, marking of whales, delivery of whales to factory for processing, etc.
- M
8-07422
- Norway. Laws, Statutes, etc. (1962)**
Norsk Lovtid., (6) : 84
 Resolujon om sentralisering av eksporten av saltet zvintersild til Sverige.—9. februar 1962 (Order in council concerning the centralization of exports of salt winter herring to Sweden.—9 February 1962)
- M
8-07423
- Norway. Laws, Statutes, etc. (1962)**
Norsk Lovtid., (6) : 95
 Skriv om setting av vintersildoppsynet 1962.—12. februar 1962 (Circular concerning organization of control of winter herring fishing in 1962.—12 February 1962)
- M
8-07424
- Pakistan. Laws, Statutes, etc. (1962)**
Gaz. Pakist., Extr.: 861o–861x
 Ordinance No. 38 of 1962. Provincial industrial development corporation (West Pakistan) ordinance, 1962: an ordinance to establish an industrial development corporation for West Pakistan.—1 June 1962
- Is responsible for planning, promoting, organizing and implementing programmes for the establishment of industries listed in the schedule, comprising exploitation of marine fisheries except fisheries outside territorial waters.
- M
8-07425
- Pakistan. Laws, Statutes, etc. (1962)**
Gaz. Pakist., Extr. : 1070f–1070l
 S.R.O. 27 (R)/62. Customs notification in supersession of notifications Nos. 41—Customs, of 19 November 1951, and S.R.O. 468 (K)/61, of 18 April 1961.—12 June 1962
- Partial exemption from customs duties on various articles, including fish and whale oil.
- M
8-07426
- Poland. Laws, Statutes, etc. (1961)**
Dziennik Ustaw, (31), Text 143 : 253
 Międzynarodowa konwencja o rybolówstwie na Północno-zachodnim atlantyku sporządzona w Waszyngtonie dnia 8 lutego 1949 r.—19 lipca 1961 r. (Ratification of the international convention for the northwest Atlantic fisheries, signed in Washington on February 8, 1949.—19 July 1961)

Poland. Laws, Statutes, etc. (1962)
Dziennik Ustaw, (22), Text 99 : 162-3

M
8-07427

Rozporządzenie ministra finansów z dnia 16 marca 1962 r. w sprawie zmiany rozporządzenia z dnia 13 czerwca 1949 r. o poborze podatku dochodowego w formie rycaltu od rybaków morskich (Order amending the order of 13 June 1949 relating to the collection in a lump sum of the income tax payable by sea fishermen.—16 March 1962)

Amends order Dz.U. texts 1949/280 and 1954/286.

Portugal. Laws, Statutes, etc. (1961)
Diário do Gov., Lisboa, 1 (15) : 50

M
8-07428

Decreto n.º 43 475: dá nova redacção ao corpo de artigo 3.º do decreto n.º 38 806, alterado pelo artigo único do decreto n.º 40 136 (comissão consultiva nacional das pescarias do noroeste do Atlântico).—18 de janeiro de 1961 (Decree No. 43 475 redrafting article 3 of decree No. 38 806 as amended by the sole article of decree No. 40 136 (national fishery advisory commission for the northeast Atlantic).—18 January 1961)

Provides for the membership of the commission.

Portugal. Laws, Statutes, etc. (1961)
Diário do Gov., Lisboa, 1 (24) : 95-6

M
8-07429

Decreto n.º 43 489 : autoriza a direcção geral da fazenda pública a emitir, pelo fundo de renovação e de apetrechamento da indústria da pesca, a obrigação geral representativa da 4.ª série do empréstimo de renovação e de apetrechamento da indústria da pesca.—II plano de fomento, na importância de 74 000 000\$.—28 de janeiro de 1961 (Decree No. 43 489 authorizing the general directorate of public finance to issue on behalf of the fishing industry renewal and supply fund the bonds representing the 4th series of the fishing industry renewal and supply fund loans as part of the 2nd development plan, for the amount of 74 million escudos.—28 January 1961)

Portugal. Laws, Statutes, etc. (1961)
Diário do Gov., Lisboa, 1 (25) : 98

M
8-07430

Decreto n.º 43 491: dá nova redacção aos corpos dos artigos 5.º e 11.º e ao artigo 13.º do decreto n.º 29 755, que cria o grémio dos armadores de pesca de arrasto (Decree No. 43 491 redrafting the texts of articles 5 and 11 and article 13 of decree No. 29 755 which established the trawling vessel owners' syndicate.—30 January 1961)

Changes in managerial organization in view of expansion of trawl fishing in the past ten years.

Portugal. Laws, Statutes, etc. (1961)
Diário do Gov., Lisboa, 1 (36) : 146

M
8-07431

[For correction see: D.G. No. 63, 17 March 1961]

Decreto n.º 43 504: dá nova redacção ao artigo 3.º do decreto n.º 9902 (regras a adoptar no serviço das arqueações).—11 de fevereiro de 1961 (Decree No. 43 504 redrafting article 3 of decree No. 9902 (rules to be adopted in the dimensions service).—11 February 1961)

Deals with the dimensions, size and tonnage of fishing vessels.

M

Portugal. Laws, Statutes, etc. (1961)

8-07432

Diário do Gov., Lisboa, 1 (39) : 151-5

Decreto n.º 43 507: promulga o estatuto orgânico do Instituto de Biologia Marítima—revoga o decreto n.º 40 190.—15 de fevereiro de 1961 (Decree No. 43 507 promulgating the statute establishing the Marine Biology Institute and repealing decree No. 40 190.—15 February 1961)

Extensive provisions, repealing and replacing decree No. 40 190 of 17 June 1955. Purpose and functions of the institute are prescribed, and its organization and management are described.

M

Portugal. Laws, Statutes, etc. (1961)

8-07433

Diário do Gov., Lisboa, 1 (108) : 546-7

Portaria n.º 18 467: estabelece un regime experimental para a pesca dos crustáceos com artes de arrastar pelo fundo.—9 de maio de 1961 (Order No. 18 467 establishing an experimental system for fishing crustaceans with deep-water drag nets.—9 May 1961)

M

Portugal. Laws, Statutes, etc. (1961)

8-07434

Diário do Gov., Lisboa, 1 (182) : 984

Declaração: mantém para a campanha de 1961-1962 os preços e características do bacalhau salgado seco nacional e de procedência estrangeira, constantes da declaração inserta no *Diário do Governo* n.º 263, de 12 de novembro de 1960.—1 de agosto de 1961 (Declaration maintaining for the 1961-1962 season the prices and characteristics required of Portuguese and foreign dried salted cod as set forth in the declaration appearing in *Diário do Governo* No. 263 of 12 November 1960.—1 August 1961)

M

Spain. Laws, Statutes, etc. (1962)

8-07435

Bol. ofic. Estado, Madr., (170) : 9915-6

[For correction see: *B.O.E.* No. 183, 1 August 1962, p. 10784]

Orden por la que se aprueba el cuadro general de vedas y dimensiones mínimas para la captura, circulación y venta en todo el territorio nacional de crustáceos y moluscos, así como las denominaciones de las concesiones de la zona marítimo-terrestre para su aprovechamiento pesquero.—27 de junio de 1962 (Order approving the general rules governing prohibition and minimum dimensions for the capture, transport and sale throughout the territory of the country of crustaceans and molluscs and also approving the denomination of the concessions in the coastal area where they may be fished.—27 June 1962)

Consolidates provisions governing this subject. The minimum size and close season are extended in respect of *Pecten maximus* and *Chlamys opercularie*.

Spain. Laws, Statutes, etc. (1962) M
8-07436
Bol. ofic. Estado, Madr., (189) : 11142-4

Resolución por la que se aprueba el reglamento orgánico provisional de la junta de enseñanzas náuticas y de formación profesional náutico-pesquera.—5 de julio de 1962 (Resolution approving the provisional organic regulations of the nautical and vocational fisheries training board.—5 July 1962)

Detailed provisions respecting composition, functions and administration of the board.

Spain. Laws, Statutes, etc. (1962) M
8-07437
Bol. ofic. Estado, Madr., (215) : 12692

Orden por la que se establece la obligatoriedad de realizar pruebas de estabilidad en todos los buques y embarcaciones nacionales.—3 de septiembre de 1962 (Order making it compulsory to carry out tests on all Spanish ships and vessels.—3 September 1962)

Within a one-year period.

Sweden. Laws, Statutes, etc. (1962) M
8-07438
Svensk FörfSaml., (100) : 249-51

Kungl. Maj:ts Kungörelse Nr 100 om fiskredskapslån—6 april 1962 (Royal order No. 100, concerning fishing equipment loans.—6 April 1962)

Repeals and replaces orders Nos. 678 of 15 Oct. 1948 and 937 of 31 Dec. 1943.

Syrian Arab Republic. Laws, Statutes, etc. (1962) M
8-07439
Rec. Lois Répub. arabe syr., (7) : 74-5

Arrêté N° 397 du 14 juillet 1962 ajoutant certains produits et marchandises au tableau annexé à l'arrêté N° 511 du 18 août 1959 exemptant certains produits et marchandises du droit d'importation (Order No. 397 adding certain products and goods to the schedule to order No. 511 of 18 August 1959 exempting certain products and goods from import duties.—14 July 1962)

Such products and goods include fish oil.

Syrian Arab Republic. Laws, Statutes, etc. (1962) M
8-07440
Rec. Lois Répub. arabe syr., (8) : 41-2

Arrêté N° 458 du 5 août 1962 autorisant l'exportation de certains produits sans licences (Order No. 458 authorizing the export of certain products without licences.—5 August 1962)

Such products include preserved sardines.

M

U.K. Laws, Statutes, etc. (1962)

8-07441

Statut. Instrum. U.K., (1394) : 4 p.

The salmon and migratory trout (drift-net fishing) restrictions on landing order 1962.—5 July 1962

Landings may be lawfully effected if the catching of the fish off the coasts of England and Wales has been authorized by a licence. Order valid until 15 Feb. 1965.

M

U.K. Laws, Statutes, etc. (1962)

8-07442

Statut. Instrum. U.K., (1520) : 2 p.

The white fish and herring subsidies (aggregate amount of grants) order 1962.—4 July 1962

Amount increased to £30,250,000.

M

U.K. Laws, Statutes, etc. (1962)

8-07443

Statut. Instrum. U.K., (1586) : 5 p.

The white fish industry (grants for fishing vessels and engines) scheme 1962.—4 July 1962

Revokes and replaces the scheme of 1955 and amending schemes. The principal changes relate to the amount of grants which may be paid; the reduction, to ten years in the case of vessels and five years in the case of engines, of the period during which grants might become repayable; the removal of the restrictions on voyages to distant waters by grant-assisted vessels; and the removal of the condition that applications shall be entertained only in respect of vessels and engines built or to be built in the United Kingdom.

M

U.K. Laws, Statutes, etc. (1962)

8-07444

Statut. Instrum. U.K., (1587) : 8 p.

The white fish subsidy (United Kingdom) scheme 1962.—4 July 1962

This scheme succeeds the scheme of 1961 as amended. It provides for payment of grants from 1 Aug. 1962 to 31 Jul. 1963. These grants are payable on landings of fish by vessels under 60 feet in length and for voyages by fishing vessels of 60 feet in length and over.

M

U.K. Laws, Statutes, etc. (1962)

8-07445

Seychelles Govt Gaz., (42), Suppl. p. 44

S.I. No. 29 of 1962: the female turtles protection regulations, 1962, made under the turtles ordinance (chapter 22).—19 July 1962

Catching, killing, harpooning and other taking possession of female turtles unlawful in certain places during the whole or part of the year.

MISCELLANEOUS AND AUXILIARIES

U.S. Laws, Statutes, etc. (1960)

M

8-07446

Treat. int. Acts Ser. U.S.A., (5014) : 4 p.

Amendments to the schedule to the international whaling convention (signed at Washington on December 2, 1946), adopted at the twelfth meeting of the International Whaling Commission.—24 June 1960

Concerns in particular the use of whale catchers attached to a factory ship in defined areas.

U.S. Laws, Statutes, etc. (1961)

M

8-07447

Treat. int. Acts Ser. U.S.A., (5015) : 2 p.

Amendments to the schedule to the international whaling convention (signed at Washington on December 2, 1946), adopted at the thirteenth meeting of the International Whaling Commission.—23 June 1961

Concerns the taking of humpback whales in Greenland waters, change of closed season, and treating of whales without use of land station.

U.S. Laws, Statutes, etc. (1962)

M

8-07448

Treat. int. Acts Ser. U.S.A., (4992) : 4 p.

Amendment to the annex to the international convention for the high seas fisheries of the North Pacific Ocean.—11 November 1961

The annex to the convention of 9 May 1952 between USA, Canada and Japan is amended with respect to the removal from the annex of herring off the coast of the USA south of the entrance to the strait of Juan de Fuca.

U.S. Laws, Statutes, etc. (1962)

M

8-07449

Fed. Reg. U.S., (83) : 4063

CFR title 21—chapter 1—part 37: Fish, definitions and standards of identity; standards of fill of container. Fish flour, identity; stay of order and notice of public hearing.—25 April 1962

Suspends order published in the Federal Register of 25 Jan. 1962 (27 FR 740).

U.S. Laws, Statutes, etc. (1962)

M

8-07450

Fed. Reg. U.S., (110) : 5400

CFR title 50—chapter 1—part 33: Sport fishing. Bering Sea national wildlife refuge, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

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- U.S. Laws, Statutes, etc.** (1962) M
8-07451
Publ. Laws U.S.A., (87-580), 87th Congress, H.R. (7336) : 1 p.

An act to promote the production of oysters by propagation of disease-resistant strains, and for other purposes.—9 August 1962

The Secretary of the Interior is authorized to acquire and transfer to states oyster brood stock that he believes possesses resistance to the causative agent of excessive mortality. He may also make grants to states for research, etc.

- Southward, G. M.** (1962) M
8-07452
J. Fish. Res. Bd Can., 19 (2) : 335-8

Photographing halibut otoliths for measuring growth zones

Apparatus is described for clearing, projecting and photographing halibut otoliths for use in growth studies.

- U.S. Laws, Statutes, etc.** (1962) MG
8-07453
Fed. Reg. U.S., (157) : 8076

CFR title 50—chapter 1—part 33: Sport fishing. Loxahatchee national wildlife refuge, Florida.—13 August 1962

In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

- Carrick, R.** (1960) MG
8-07454
S.C.A.R. Bull., (6) : 66-75

Conservation of nature in the Antarctic

General review, with special references to seals and whales.

- NAS/NRC/(US)** (1961)* MF
8-07455
Publ. nat. Acad. Sci., Wash., (839) : 2 pts
Science in Antarctica

- Zane, El. & V. Gomboşiu** (1962) MF
8-07456
Bull. Inst. Cerc. pisc., 21 (2) : 74-96

Lucrările nepublicate efectuate de Institutul de cercetări şi proiectări piscicole în perioada 1950-1961 (Works not yet published of the Institute for Research and Planning Fisheries for the period 1950-1961). Ro

Lists 350 such studies by author, title and subject.

- New South Wales. Laws, Statutes, etc.** (1962) MF
8-07457
Govt Gaz. N.S.W., (56) : 1688

Proclamation, made under the fisheries and oyster farms act, 1935, as amended relating to the territorial tidal waters of New South Wales.—23 May 1962

Prohibits, in the specified tidal waters, the taking of fish by any line to which more than six fishing-hooks are attached, except for small-sized hooks, from 1 Jun. 1962 to 31 May 1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (66) : 2021 8-07458

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Sponsor's Lagoon, Tweed River, County of Rous.—13 June 1962

Prohibits in the specified tidal waters the taking of fish by nets of every description other than the prescribed dip or scoop net for the capture of prawns only, from 1 Jul. 1962 to 30 Jun. 1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (66) : 2020 8-07459

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the whole of the waters of Myall Lakes, including Booloombayt Lake and the Broad-Water.—20 June 1962

Prohibits in the specified tidal waters the taking of fish by nets of every description other than hauling nets not exceeding 20 feet in length and the prescribed dip or scoop net, from 18 Jul. 1962 to 17 Jul. 1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (66) : 2020 8-07460

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Clyde River, County of St. Vincent.—20 June 1962

Prohibits in the specified tidal waters the taking of fish by all methods other than a single rod and line or handline with not more than two hooks attached, from 1 Aug. 1962 to 31 Jul. 1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (66) : 2019 8-07461

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Myall River, Corrie Creek and Paddy Marr's Bar, County of Gloucester.—27 June 1962

Prohibits in the specified tidal waters the taking of fish by spears, spearguns and similar devices from 1 Jul. 1962 to 30 Jun. 1967.

New South Wales. Laws, Statutes, etc. (1962) MF
Govt Gaz. N.S.W., (66) : 2036 8-07462

Amendment of regulations made under the fisheries and oyster farms act, 1935-1960.—13 July 1962

Minor amendment.

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- MF
8-07463
- New South Wales. Laws, Statutes, etc. (1962)**
Govt Gaz. N.S.W., (70) : 2170
 Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to Lord Howe Island.—4 July 1962
- Prohibits in the specified tidal waters, from 1 Sep. 1962 to 31 Aug. 1967, the taking of (a) all species of fish by fishing nets of every description and by the use of spears, spearguns and similar devices; (b) of butterfly cod and double-headers by the use of spears, spearguns and similar devices.
- MF
8-07464
- Tasmania. Laws, Statutes, etc. (1961)**
Statut. Rules Aust., (93) : 2 p.
 Sea fisheries amendment regulations (No. 2) 1961, made under the fisheries act 1959.—4 July 1961
- Various amendments in respect of scallop fishing and the taking of crayfish, penalties, etc.
- MF
8-07465
- Western Australia. Laws, Statutes, etc. (1962)**
Govt Gaz. W. Aust., (45) : 1491
 Notification F.D. 167/53 made under the fisheries act, 1905-1961.—1 June 1962
- Ci 62-00465. Imposes certain conditions in respect of fishing licences. Repeals notice published in *G.G.* No. 63 of 22 Jul. 1960.
- MF
8-07466
- Western Australia. Laws, Statutes, etc. (1962)**
Govt Gaz. W. Aust., (56) : 1870
 Proclamation F.D. 87/39, Ex. Co. No. 1415 made under the fisheries act, 1905-1961.—18 July 1962
- Prohibits the taking of fish by nets, in the waters of Peel and Harvey Estuary, each week-end, from 1 Aug. 1962 to 31 Jul. 1967.
- MF
8-07467
- Belgium. Laws, Statutes, etc. (1962)**
Monit. belge, (179) : 6312-3
 Arrêté ministériel relatif aux licences d'importation et d'exportation pour certains produits agricoles et alimentaires.—26 juillet 1962 (Ministerial order relative to import and export licences for certain agricultural and food products.—26 July 1962)
- Applies also to fishing bait in small packets containing cereals other than rice and/or cereal by-products.
- MF
8-07468
- Canada. Laws, Statutes, etc. (1962)**
Can. Gaz. (II), (10-11) Eliz. II, Chap. 16 : 57
 An act to amend the fisheries improvement loans act.—23 March 1962
- The minister is not liable under this act to make a payment to a lender in respect of a guaranteed loan made after the 30th day of June 1965.

MF

8-07469

Canada. Laws, Statutes, etc. (1962)

Can. Gaz. (II), (10-11) Elis. II, Chap. 16 : 57

Loi modifiant la loi sur les prêts aidant aux opérations de pêche.—23 mars 1962 (An act to amend the fisheries improvement loans act.—23 March 1962)

Fr 8-07468.

MF

8-07470

Canada. Laws, Statutes, etc. (1962)

Can. Gaz. (II), (7) : 408-10

SOR/62-122. Order in council P.C. 1962-430 amending the Saskatchewan fishery regulations made under the fisheries act.—29 March 1962

Miscellaneous amendments in respect of angling, bag limits, use of nets, commercial fishing, etc.

MF

8-07471

Canada. Laws, Statutes, etc. (1962)

Can. Gaz. (II), (7) : 418-21

DORS/62-122. Décret C.P. 1962-430, modifiant le règlement de pêche de la Saskatchewan en vertu de la loi sur les pêcheries.—29 mars 1962 (SOR/62-122. Order in council P.C. 1962-430 amending the Saskatchewan fishery regulations made under the fisheries act.—29 March 1962)

Fr 8-07470.

MF

8-07472

Canada. Laws, Statutes, etc. (1962)

Can. Gaz. (II), (8) : 426-9

SOR/62-131. Order in council P.C. 1962-468, relating to Fraser River sockeye and pink salmon fishery regulations, 1962, pursuant to the fisheries act.—5 April 1962

New regulations applicable to the year 1962.

MF

8-07473

Canada. Laws, Statutes, etc. (1962)

Can. Gaz. (II), (8) : 441-4

DORS/62-131. Décret C.P. 1962-468 relatif au règlement de 1962 sur la pêche des saumons sockeye et rose du Fraser en vertu de la loi sur le pêcheries.—5 avril 1962 (SOR/62-131. Order in council P.C. 1962-468, relating to Fraser River sockeye and pink salmon fishery regulations, 1962, pursuant to the fisheries act.—5 April 1962)

Fr 8-07472.

MF

8-07474

Canada. Laws, Statutes, etc. (1962)

Can. Gaz. (II), (8) : 440

SOR/62-138. Order in council P.C. 1962-518 amending the Nova Scotia fishery regulations made under the fisheries act.—12 April 1962

Amendments respecting salmon fishing.

- Canada. Laws, Statutes, etc. (1962)** MF
8-07475
Can. Gaz. (II), (8) : 455
DORS/62-138. Décret C.P. 1962-518 modifiant le règlement de pêche de la Nouvelle-Écosse en vertu de la loi sur les pêcheries.—12 avril 1962 (SOR/62-138. Order in council P.C. 1962-518 amending the Nova Scotia fishery regulations made under the fisheries act.—12 April 1962)

Fr 8-07474.

- Canada. Laws, Statutes, etc. (1962)** MF
8-07476
Can. Gaz. (II), (8) : 441-4
SOR/62-139. Order in council P.C. 1962-519 amending the British Columbia fishery regulations made under the fisheries act.—12 April 1962

Numerous amendments in respect of bag limits, closed seasons, etc.

- Canada. Laws, Statutes, etc. (1962)** MF
8-07477
Can. Gaz. (II), (8) : 456-9
DORS/62-139. Décret C.P. 1962-519 modifiant le règlement de pêche de la Colombie-Britannique en vertu de la loi sur les pêcheries.—12 avril 1962 (SOR/62-139. Order in council P.C. 1962-519 amending the British Columbia fishery regulations made under the fisheries act.—12 April 1962)

Fr 8-07476.

- Canada. Laws, Statutes, etc. (1962)** MF
8-07478
Statut. Can., (10-11), Elis. II, Chap. 29 : 123-9
An act to amend the veterans' land act.—18 April 1962

Inter alia new section 65 on assistance loans to part-time farmers and commercial fishermen.

- Canada. Laws, Statutes, etc. (1962)** MF
8-07479
Statut. Can., (10-11), Elis. II, Chap. 29 : 125-31
Loi modifiant la loi sur les terres destinées aux anciens combattants.—18 avril 1962 (An act to amend the veterans' land act.—18 April 1962)

Fr 8-07478.

- Canada. Laws, Statutes, etc. (1962)** MF
8-07480
Can. Gaz. (II), (10) : 536
SOR/62-173. Order in council P.C. 1962-680 amending the fish inspection regulations pursuant to the fish inspection act.—12 May 1962

Concerns packing of 'spring mackerel', pickled salmon, trout and char.

Canada. Laws, Statutes, etc. (1962) MF
8-07481
Can. Gaz. (II), (10) : 558

DORS/62-173. Décret C.P. 1962-680 modifiant le règlement sur l'inspection du poisson en vertu de la loi sur l'inspection du poisson.—12 mai 1962 (SOR/62-173. Order in council P.C. 1962-680 amending the fish inspection regulations pursuant to the fish inspection act.—12 May 1962)

Fr 8-07480.

Canada. Laws, Statutes, etc. (1962) MF
8-07482
Can. Gaz. (II), (12) : 643-7

SOR/62-213. Order in council 1962-824 amending the Newfoundland fishery regulations made under the fisheries act.—12 June 1962

In respect of fishing for salmon and cod with traps and nets, commercial salmon and cod fishing licences, etc.

Canada. Laws, Statutes, etc. (1962) MF
8-07483
Can. Gaz. (II), (12) : 669-73

DORS/62-213. Décret C.P. 1962-824 modifiant le règlement de pêche de Terre-Neuve, en vertu de la loi sur les pêcheries.—12 juin 1962 (SOR/62-213. Order in council 1962-824 amending the Newfoundland fishery regulations made under the fisheries act.—12 June 1962)

Fr 8-07482.

Canada. Laws, Statutes, etc. (1962) MF
8-07484
Can. Gaz. (II), (13) : 686

SOR/62-227. Order in council 1962-876 amending the British Columbia fishery regulations made under the fisheries act.—20 June 1962.

During the year 1962 no person shall fish for or catch salmon with gill-net or drift-net gear the web or any portion of the web of which contains monofilament in single or multiple strands.

Canada. Laws, Statutes, etc. (1962) MF
8-07485
Can. Gaz. (II), (13) : 712

DORS/62-227. Décret C.P. 1962-876 modifiant le règlement de pêche de la Colombie-Britannique en vertu de la loi sur les pêcheries.—20 juin 1962 (SOR/62-227. Order in council 1962-876 amending the British Columbia fishery regulations made under the fisheries act.—20 June 1962)

Fr 8-07484.

Canada. Laws, Statutes, etc. (1962) MF
8-07486
Can. Gaz. (II), (15) : 765-71

SOR/62-263. Order in council P.C. 1962-1003 amending the Quebec fishery regulations made under the fisheries act.—18 July 1962

Numerous amendments in respect of licences, bag limits, closed seasons, etc.

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Canada. Laws, Statutes, etc. (1962)

MF
8-07487

Can. Gaz. (II), (15) : 795-801

DORS/62-263. Décret C.P. 1962-1003 modifiant le règlement de pêche du Québec en vertu de la loi sur les pêcheries.—18 juillet 1962 (SOR/62-263. Order in council P.C. 1962-1003 amending the Quebec fishery regulations made under the fisheries act.—18 July 1962)

Fr 8-07486.

FAO. Fisheries Division, Technology Branch (1963)

MF
8-07488

Rome, 185 p.

List of films and filmstrips on fisheries and related subjects

Lists 638 films and 58 filmstrips with technical data and content summary. Gives addresses of distributors and incl. a subject index. About half of the listed titles deal with marine biology and fishery. NE 61-04814.

Canada. Laws, Statutes, etc. (1962)

MF
8-07489

Can. Gaz. (II), (16) : 836

SOR/62-294. Order in council P.C. 1962-1113, amending the British Columbia fishery regulations made under the fisheries act.—8 August 1962

Concerns fishing for salmon in prescribed areas.

Canada. Laws, Statutes, etc. (1962)

MF
8-07490

Can. Gaz. (II), (16) : 868

DORS/62-294. Décret C.P. 1962-1113 modifiant le règlement de pêche de la Colombie-Britannique en vertu de la loi sur les pêcheries.—8 août 1962 (SOR/62-294. Order in council P.C. 1962-1113, amending the British Columbia fishery regulations made under the fisheries act.—8 August 1962)

Fr 8-07489.

Canada. Laws, Statutes, etc. (1962)

MF
8-07491

Can. Gaz. (II), (17) : 944

SOR/62-324. Order in council P.C. 1962-1168 amending the New Brunswick fishery regulations made under the fisheries act.—22 August 1962.

Angling for salmon is permitted in the prescribed rivers until the fifteenth day of October.

Canada. Laws, Statutes, etc. (1962)

MF
8-07492

Can. Gaz. (II), (17) : 987

DORS/62-324. Décret C.P. 1962-1168 modifiant le règlement de pêche du Nouveau-Brunswick en vertu de la loi sur les pêcheries.—22 août 1962 (SOR/62-324. Order in council P.C. 1962-1168 amending the New Brunswick fishery regulations made under the fisheries act.—22 August 1962)

Fr 8-07491.

- MF
8-07493
- Manitoba. Laws, Statutes, etc.** (1962)
Statut. Manitoba, 1961-1962, (10-11) Eliz. II, Chapter 21 : 61-2
 An act to amend the fish dealers act.—1 May 1962

Amendments respecting definitions, licences to engage in the business of a fish pedlar, suspension of licences when conditions on premises are detrimental to the quality of the fish, etc.

- MF
8-07494
- Saskatchewan. Laws, Statutes, etc.** (1962)
Statut. Saskatchewan, 1961-1962, 3rd Session of the 14th Legislature, Chapter 19 : 38-40

The pollution of waters (prevention) act, 1962, an act to prevent the pollution of certain waters.—30 March 1962

General prohibition respecting deposit of certain substances in or near waters. The use of substances for eliminating weeds, etc. is made subject to a permit. Chapter 319 of the revised statutes of Saskatchewan is repealed.

- MF
8-07495
- Chile. Laws, Statutes, etc.** (1962)
Diario ofic., Santiago, (25.281) : 1341

Decreto No. 680 por el que se aprueba modificaciones al reglamento general de policía marítima, fluvial y lacustre.—15 de junio de 1962 (Decree No. 680 approving modifications to the general maritime, river and lake police regulations.—15 June 1962)

Minor amendments.

- MF
8-07496
- Cuba. Laws, Statutes, etc.** (1962)
Gaceta ofic. Cuba, (50) : 3124-5

Resolución de la junta nacional para la distribución de los abastacimientos por la que se declara los artículos de consumo, sujetos a racionamiento en todo el territorio nacional.—13 de marzo de 1962 (Resolution of the national supplies distribution board declaring consumer goods subject to rationing.—13 March 1962)

Rationing on a local basis of fish.

- MF
8-07497
- Denmark. Laws, Statutes, etc.** (1962)
Lovtidende A, (14) : 597

Nr. 163. Bekendtgørelse om forhøjelse af mindstemålet for rødspætter.—11 maj 1962 (Notification No. 163, increasing the minimum size of plaice.—11 May 1962)

- MF
8-07498
- Denmark. Laws, Statutes, etc.** (1962)
Lovtidende A, (14) : 602

Nr. 167. Lov om ændring af lov om kvalitetskontrol med fisk og fiskevarer.—16 maj 1962 (Act No. 167, amending the act on quality control of fish and fish products.—16 May 1962)

In respect of fish food and fish meal.

Denmark. Laws, Statutes, etc. (1962) MF
8-07499
Lovtidende A, (18) : 694-707

Nr. 210. Bekendtgørelse om indførsel af varer m.v.—14. juni 1962 (Notification No. 210, concerning the importation of merchandise.—14 June 1962)

Also covers fish, crustaceans, and molluscs, etc.

Guadeloupe. Laws, Statutes, etc. (1962) MF
8-07500
Rec. Actes adm. Guadeloupe, (27) : 360-1

Arrêté n° 62-1.524 relatif au blocage des prix de tous les produits et services. (Order No. 62-1.524 relative to the freezing of the prices of all products and services.—11 July 1962)

Fish and fish products are exempted.

Greece. Laws, Statutes, etc. (1962) MF
8-07501
Ephēm. Kybern., (II), (28) : 344

Agoranomiki Diátaxis up'arith. 3 perí trópou diathéseos nopōn ichthúon exoterikou (Supply order No. 3, relating to methods of handling fresh fish imported from abroad.—15 January 1962)

Haiti. Laws, Statutes, etc. (1962) MF
8-07502
Monit., Haiti, (51-52) : 195-206, 207-13

Loi modifiant le code rural de 1864 en vue de l'adapter aux conditions actuelles.—24 mai 1962 (Act modifying the rural code of 1864 to adapt it to present conditions.—24 May 1962)

Complete revision. Part ix deals with hunting and fishing and lays down general rules.

Iraq. Laws, Statutes, etc. (1962) MF
8-07503
Wkly Gaz. Rep. Iraq., (28) : 510

Notification No. 1 of 1962, made under the fisheries law No. 41 of 1958.—Undated

Prohibits the fishing of the following species: shaboot, cittan, bunni fish, and coloured Japanese and Indonesian carp fish, under the prescribed sizes.

Ireland. Laws, Statutes, etc. (1961) MF
8-07504
Statut. Instrum. Ire., (76) : 3

An tordú Um Líonta Iascaigh (Mogall a Rialú) (Leasú), 1961.—14ú lá seo d'Aibreán, 1961) (Fishing nets (regulations of mesh) (amendment) order, 1961.—14 April 1961)

Permits up to 14 April 1963, the use of certain fishing nets having a smaller mesh than that specified in 1954.

MISCELLANEOUS AND AUXILIARIES

MF
8-07505

Ireland. Laws, Statutes, etc. (1961)
 Act No. 44 of 1961, Separate Publications, 21 p.
 Acht Iascaigh an Fheabhail (Leasu), 1961.—20 Nollaig 1961 (Foyle fisheries (amendment) act, 1961: an act to amend the Foyle fisheries act, 1952.—20 December 1961)

Various amendments in respect of pollution and fishing regulations. Certain provisions of the fisheries (consolidation) act of 1959 are extended to Moville area.

MF
8-07506

Ireland. Laws, Statutes, etc. (1962)
Statut. Instrum. Ire., (24) : 3
 An tordú Um Acht Iascaigh an Fheabhail (Leasú), 1961 (Tosach Feidhme), 1962.—16ú lá seo d'Fheabhra, 1962 (Foyle fisheries (amendment) act, 1961 (commencement) order, 1962.—16 February 1962)

Appoints 1 Mar. 1962 as the day on which the Foyle fisheries (amendment) act, 1961, comes into operation.

MF
8-07507

Mexico. Laws, Statutes, etc. (1962)
Diario ofc., Méx., (22) : 2-3
 Acuerdo que dispone que la importación de anchoas, angulas y bocarte refrigerados o congelados, queda sujeta a previo permiso de la Secretaría de Industria y Comercio.—20 marzo 1962 (Order rendering the import of refrigerated or frozen anchovies, eels and bocarte subject to prior authorization by the Secretariat of Industry and Trade.—20 March 1962)

MF
8-07508

Netherlands. Laws, Statutes, etc. (1962)
Staatsblad, Den Haag, Text 331 : 803-9
 Besluit van 25 augustus 1962, houdende wijziging van het tariefbesluit 1960 en van daarmede samenhangende andere wettelijke maatregelen (Decree 1962-VII amending the import tariff: decree amending the 1960 tariff decree and various other legal measures.—25 August 1962)

Specifies import duties on products, including fish, both in general and for imports from European community.

MF
8-07509

Norway. Laws, Statutes, etc. (1962)
Norsk Lovtid., (9) : 140-1
 Bestemmelse om endring av kongelig resolusjon av 19. mars 1954 om fredningsbestemmelser for Munkeelva og Sandneselva i Sør-Varanger.—1. mars 1962 (Circular amending the order in council of 19 March 1954, concerning the protection of fishing in Munkeelva, Sandneselva, in Sør-Varanger district.—1 March 1962)

Concerns open season, closed areas and mesh sizes.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Norway. Laws, Statutes, etc. (1962)

MF
8-07510

Norsk Lovtid., (18) : 365

Bestemmelse om opphevelse av kgl. resolusjon av 20. mars 1953 vedr. kvalitetskontroll med fiskehermetikk m.v. og om opphevelse av kgl. resolusjon av 30. mai 1958 vedr. merking av hermetisk nedlagte fiskevarer.—9. mai 1962 (Regulations abrogating the order in council of 20 March 1953, concerning quality control of fish preserves, etc., and the order in council of 30 May 1958 concerning the marking of fish preserves.—9 May 1962)

Norway. Laws, Statutes, etc. (1962)

MF
8-07511

Norsk Lovtid., (18) : 365

Resolusjon om endr. av avsnitt I i kgl. resolusjon av 8. april 1960 om kvalitetskontroll med fisk og fiskevarer.—9. mai 1962 (Order in council amending section I of the order in council of 8 April 1960, concerning quality control of fish and fish products.—9 May 1962)

Authorizes fisheries department to issue regulations under various sections of the act of 28 May 1959.

Norway. Laws, Statutes, etc. (1962)

MF
8-07512

Norsk Lovtid., (18) : 365-7

Bestemmelser om kvalitetskontroll med fiskehermetikk m.v.—9. mai 1962 (Measures concerning quality control of fish preserves, etc.—9 May 1962)

Assigns responsibilities of various administrative agencies.

Norway. Laws, Statutes, etc. (1962)

MF
8-07513

Norsk Lovtid., (21) : 403

Resolusjon om opphevelse av sentraliseringen av eksporten av hermetisk nedlagt fisk til Filippinene.—1. juni 1962 (Order in council eliminating centralization of fish preserves exports to the Philippines.—1 June 1962)

Philippines. Laws, Statutes, etc. (1962)

MF
8-07514

Off. Gaz., Manila, (22) : 4263-4

Executive order No. 10 designating calendar year 1962 as economic census year.—23 May 1962

Includes fishery.

Poland. Laws, Statutes, etc. (1962)

MF
8-07515

Dziennik Ustaw, (25), Text 115 : 210-1

Rozporządzenie ministra żeglugi z dnia 19 marca 1962 r. w sprawie ochrony rybolówstwa na Zalewie Wiślanym (Order of the ministry of the navigation relating to the protection of fishing in the Vistula estuary.—19 March 1962)

Fish and net sizes, etc. Repeals and replaces order of 4 February 1953, Dz. U. Text 58 and 1954/226.

Portugal. Laws, Statutes, etc. (1961) MF
8-07516
Diário do Gov., Lisboa, 1 (82) : 407-8

Portaria no. 18 3888: fixa os valores para a cobrança dos direitos de exportação referentes a mercadorias sujeitas a tributação *ad valorem*.—8 de abril de 1961 (Order No. 18 3888 fixing the amount of export duties on goods subject to *ad valorem* tax.—8 April 1961)

Includes fisheries products.

Portugal. Laws, Statutes, etc (1961) MF
8-07517
Diário do Gov., Lisboa, 1 (96) : 474-5

Portaria n.º 18 418: liberta da tabela de preços máximos anexa à portaria n.º 18 113 as vendas de peixe provenientes da pesca artesanal e estabelece algumas disposições sugeridas pela aplicação da portaria n.º 18 113.—25 de abril de 1961 (Order No. 18 418 freeing sales of fish caught by professional fishermen from the tariff of maximum sales prices set forth in the annex to order No. 18 113 and laying down certain provisions suggested by the application of order No. 18 113.—25 April 1961)

Refers to order No. 18 113 of 10 Dec. 1960 establishing new basic conditions governing trade in fish in continental Portugal.

Portugal. Laws, Statutes, etc. (1961) MF
8-07518
Diário do Gov., Lisboa, 1 (299) : 1780

Declaração: mantém em vigor, por mais um ano, a tabela de preços máximos de venda de peixe na loja, anexa à portaria n.º 18 113.—14 de dezembro de 1961 (Proclamation extending for a further year the maximum price rates for the sale of fish in fish markets as established in the annex to order No. 18 113.—14 December 1961)

Ci 61-12959. Order No. 18 113 appears in *D.G.* No. 285 of 10 Dec. 1960, p. 2739.

Spain. Laws, Statutes, etc. (1962) MF
8-07519
Bol. ofic. Estado, Madr., (205) : 12201

Resolución sobre incorporación al régimen de libre importación las mercancías que se citan.—23 de agosto de 1962 (Resolution including the goods quoted in the free import regime.—23 August 1962)

Includes fish and fish preparations.

Sweden. Laws, Statutes, etc. (1962) MF
8-07520
Svensk FörfSaml., (47-48) : 33

Lag Nr 47 angående ändrad lydelse av 24 § lagen den 1 december 1950 (nr 596) om rätt till fiske.—9 mars 1962 (Act No. 47, amending art. 24 of act No. 596 of 1 December 1950 concerning fishing rights.—9 March 1962)

Minor amendments.

Sweden. Laws, Statutes, etc. (1962)MF
8-07521*Svensk FörfSaml.*, (66-67) : 112

Kungl. Maj:ts Kungörelse Nr 67 angående ändrad lydelse av 5a § kungörelsen den 21 november 1952 (nr 699) med vissa bestämmelser om stodeken av maskor i fiskredskap av nät och om minimimått på fisk m.m.—16 mars 1962 (Royal order No. 67, amending art. 5a of order No. 699 of 21 November 1952, containing certain provisions concerning fish net meshes and establishing minimum sizes for fish, etc.—16 March 1962)

Undersized fish may be taken and sold, except for food, provided that they do not constitute more than 10% by weight of the lot.

Sweden. Laws, Statutes, etc. (1962)MF
8-07522*Svensk FörfSaml.*, (98) : 245-6

Kungl. Maj:ts Kungörelse Nr. 98 om ändrad lydelse av mom. 4:0) kungörelsen den 7 augusti 1907 (nr 61 s. 1) angående ändrade bestämmelser rörande fonden för fiskerinäringens befrämjande.—13 april 1962 (Royal order No. 98 amending par. 4:0 of order No. 61, p. 1 of 7 August 1907, concerning the fisheries industry development fund.—13 April 1962)

In respect of loans from fund to economic organizations for the purchase of fishing craft and equipment.

Syrian Arab Republic. Laws, Statutes, etc. (1962)MF
8-07523*Rec. Lois Répub. arabe syr.*, (8) : 42-51

Arrêté No. 480 du 19 août 1962 approuvant le tableau comportant les produits et articles exemptés du droit d'importation (2%) (Order No. 480 approving the schedule listing products and goods exempted from import duties (2%).—19 August 1962)

Also covers fisheries products.

U.K. Laws, Statutes, etc. (1962)MF
8-07524*Statut. Instrum. U.K.*, (1393) : 2 p.

The salmon and migratory trout (drift-net fishing) licensing order 1962.—4 July 1962

As from 15 Sep. 1962, British-owned fishing boats may not fish with drift-nets for salmon or migratory trout in specified extra-territorial waters except under the authority of a licence. The specified waters include an extensive area off the east coast of England and a 25-mile belt round the remainder of the coast of England and Wales. Order valid until 15 Feb. 1965.

U.K. Laws, Statutes, etc. (1962)MF
8-07525*Statut. Instrum. U.K.*, (1532) : 14 p.

The preservatives in food regulations 1962.—17 July 1962

Also covers raw fish and the use of tetracyclines.

MISCELLANEOUS AND AUXILIARIES

MF
8-07526

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (130) : 6389
 Code of federal regulations, title 50—chapter 1—part 33: Sport fishing.
 Klamath forest national wildlife refuge, Oregon.—21 April 1962

In respect of species, open season, daily creel limits, methods of fishing, etc.

MF
8-07527

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (110) : 5399
 CFR title 50—chapter 1—part 33: Sport fishing. Aleutian Island national wildlife refuge, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

MF
8-07528

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (110) : 5399-400
 CFR title 50—chapter 1—part 33: Sport fishing. Arctic national wildlife range, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

MF
8-07529

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (110) : 5400
 CFR title 50—chapter 1—part 33: Sport fishing. Clarence Rhode national wildlife range, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

MF
8-07530

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (110) : 5400
 CFR title 50—chapter 1—part 33: Sport fishing. Izembek national wildlife range, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

MF
8-07531

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (110) : 5400
 CFR title 50—chapter 1—part 33: Sport fishing. Kenai national moose range, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

U.S. Laws, Statutes, etc. (1962)

MF
8-07532

Fed. Reg. U.S., (110) : 5400-1

CFR title 50—chapter 1—part 33: Sport fishing. Kodiak national wildlife refuge, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

U.S. Laws, Statutes, etc. (1962)

MF
8-07533

Fed. Reg. U.S., (110) : 5401

CFR title 50—chapter 1—part 33: Sport fishing. Nunivak Island national wildlife refuge, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

U.S. Laws, Statutes, etc. (1962)

MF
8-07534

Fed. Reg. U.S., (110) : 5398

CFR title 36—chapter 1—part 1: General rules and regulations. Fishing.—31 May 1962

The said rules and regulations are amended with a view to requiring any person fishing in the waters of the national monuments in Alaska to secure a State of Alaska sport fishing licence.

U.S. Laws, Statutes, etc. (1962)

MF
8-07535

Fed. Reg. U.S., (112) : 5506-7

CFR title 50—chapter 2—subchapter G—Processed fishery products, processed products thereof, and certain other processed food products—part 260: inspection and certification. Approved identification.—5 June 1962

The purpose of the addition of the new provisions is to require accountability by the processor of the removal or stripping of official United States Department of the Interior shields from packages of mislabeled fishery products.

U.S. Laws, Statutes, etc. (1962)

MF
8-07536

Fed. Reg. U.S., (139) : 6834-43

CFR title 50—chapter 2—subchapter F: Aid to fisheries—part 250: fisheries loan fund procedures. Revision of procedures.—12 July 1962

The purpose of the revision is to provide for procedural changes necessitated by transfer of certain acts formerly performed by the small business administration to the Department of the Interior, to clarify the meaning of several sections, and to provide published standards that insurance underwriters furnishing insurance in property serving as collateral for a fisheries loan must meet.

MISCELLANEOUS AND AUXILIARIES

U.S. Laws, Statutes, etc. (1962)

MF
8-07537

Fed. Reg. U.S., (155) : 7985-6

CFR title 42—chapter 1—subchapter D: Grants—part 55: grants for water pollution control—subpart B: Grants for construction of treatment works. Grant limitations.—3 August 1962

Amendments respecting grants for projects for treatment works the need for which is due in part to federal institutions or federal construction activity.

Wood, E. C. (1962)

F
8-07538

Biometrics, 18 (3) : 429

[Letter]

Ci 62-03387.

New South Wales. Laws, Statutes, etc. (1962)

F
8-07539

Govt Gaz. N.S.W., (56) : 1688

Proclamation, made under the fisheries and oyster farms act, 1935, as amended, relating to the inland waters of New South Wales.—23 May 1962

Prohibits for a period of five years from 1 Jun. 1962, in the inland waters of New South Wales west of the crest of the Great Dividing Range, the taking of fish (a) by more than one handline; (b) by more than one rod and line, having not more than two hooks attached.

New South Wales. Laws, Statutes, etc. (1962)

F
8-07540

Govt Gaz. N.S.W., (66) : 2020

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Wallis Lake, County of Gloucester.—13 June 1962

Prohibits in the specified tidal waters the taking of fish by long lines, 'jacobs', or bultows, fish traps, spears and other similar devices, from 11 Jul. 1962 to 10 Jul. 1967.

New South Wales. Laws, Statutes, etc. (1962)

F
8-07541

Govt Gaz. N.S.W., (66) : 2020

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portions of waters of Wakool River and Yallakool Creek, Counties of Cadell, Townsend and Wakool.—20 June 1962

Prohibits in the specified inland waters the taking of fish by nets of every description, from 19 Aug. 1962 to 18 Aug. 1967.

Western Australia. Laws, Statutes, etc. (1962)

F
8-07542

Govt Gaz. W. Aust., (56) : 1870

Proclamation F.D. 192/21, Ex. Co. No. 1411 made under the fisheries act, 1905-1961.—18 July 1962

Prohibits the taking of crayfish in the waters specified, from 15 Aug. 1962 to 28 Feb. 1963.

F

Canada. Laws, Statutes, etc. (1962)

8-07543

Can. Gaz. (II), (7) : 411

SOR/62-123. Order in council P.C. 1962-431 amending the Ontario fishery regulations made under the fisheries act.—29 March 1962

No holder of a non-resident angling licence shall export or take from Ontario fish taken under the authority of that licence that are so skinned or cut as to make it impossible: (a) to identify the species of any such fish, or (b) to determine the number of fish.

F

Canada. Laws, Statutes, etc. (1962)

8-07544

Can. Gaz. (II), (7) : 422

DORS/62-123. Décret C.P. 1962-431 modifiant le règlement de pêche de l'Ontario en vertu de la loi sur les pêcheries.—29 mars 1962 (SOR/62-123. Order in council P.C. 1962-431 amending the Ontario fishery regulations made under the fisheries act.—29 March 1962)

Fr 8-07543.

F

Canada. Laws, Statutes, etc. (1962)

8-07545

Can. Gaz. (II), (10) : 585-6

SOR/62-184. Order in council P.C. 1962-679 amending the Yukon territory fishery regulations made under the fisheries act.—12 May 1962

The area director may, for the purpose of ensuring a regular supply of fish for consumption in the Yukon territory throughout the year, issue to the holder of a commercial licence a special permit authorizing commercial fishing by the licensee for that purpose in any lake specified in the permit after the quota for that lake has been reached. New schedule on quota of white and lake trout from 1 May 1962 to 31 Mar. 1963.

F

Canada. Laws, Statutes, etc. (1962)

8-07546

Can. Gaz. (II), (10) : 610-11

DORS/62-184. Décret C.P. 1962-679 modifiant le règlement de pêche du territoire du Yukon en vertu de la loi sur les pêcheries.—12 mai 1962 (SOR/62-184. Order in council P.C. 1962-679 amending the Yukon territory fishery regulations made under the fisheries act.—12 May 1962)

Fr 8-07545.

F

Canada. Laws, Statutes, etc. (1962)

8-07547

Can. Gaz. (II), (11) : 609

SOR/62-198. Order in council P.C. 1962-766 amending the national parks fishing regulations made under the national parks act.—28 May 1962

F
8-07548

Canada. Laws, Statutes, etc. (1962)
Can. Gaz. (II), (12) : 641-2

SOR/62-212. Order in council P.C. 1962-823 amending the Manitoba fishery regulations made under the fisheries act.—12 June 1962

In respect of bag limits, closed seasons, closed areas and summer fishing for white fish and pickerel for commercial purposes.

F
8-07549

Canada. Laws, Statutes, etc. (1962)
Can. Gaz. (II), (12) : 667-8

DORS/62-212. Décret C.P. 1962-823 modifiant le règlement de pêche du Manitoba en vertu de la loi sur les pêcheries.—12 juin 1962 (SOR/62-212. Order in council P.C. 1962-823 amending the Manitoba fishery regulations made under the fisheries act.—12 June 1962)

Fr 8-07548.

F
8-07550

Ceylon. Laws, Statutes, etc. (1962)
Ceylon Govt Gaz., (13,217) Pt. 1, Sect. 1 : 1887-8

Food price order No. C 350 relating to dried fish and dried prawns, made under the control of prices act, No. 29 of 1950.—20 July 1962

Fixes maximum wholesale and retail prices and revokes order No. C 374 of 7 May 1962.

F
8-07551

Chile. Laws, Statutes, etc. (1962)
Diario ofic., Santiago, (25,281) : 1341-2

Decreto No. 309 por el que se reglamenta la captura de especies salmonídeas en todo el país.—5 de junio de 1962 (Decree No. 309 regulating the catching of salmonides throughout Chile.—5 June 1962)

Prohibits for an indefinite period fishing, selling, processing and transport of Salmonidae originating from Chilean inland waters.

F
8-07552

Italy. Laws, Statutes, etc. (1962)
Gazz. uff. Repub. ital., (160) : 2562

Decreto ministeriale relativo alle registrazioni alla pesca del pesce persico nel lago di Bracciano (Roma).—12 giugno 1962. (Ministerial decree relating to restrictions on perch fishing in Bracciano Lake (Rome province).—12 June 1962)

Prohibits taking perch under 22 cm.

F
8-07553

Morocco. Laws, Statutes, etc. (1962)
Bull. off. Emp. chérif., (2591) : 796, 820

Arrêté n° 348-62 du 9 juin 1962 modifiant et complétant l'arrêté du 2 mars 1962 portant réglementation annuelle de la pêche dans les eaux continentales et fixant les périodes spéciales d'interdiction et les réserves de pêche pendant la saison 1962-1963 (Order No. 348-62 amending and supplementing the order of 2 March 1962 laying down annual fishing regulations in continental waters and prescribing special closed seasons and fishing reserves for the 1962-1963 season.—9 June 1962)

Addition of three annual reserves.

Netherlands. Laws, Statutes, etc. (1962) F
8-07554
Ned. Staatscourant, (122) : 2 p.

Nr. Vi. 2655. Maat kolblei en brasem.—22 juni 1962 (Order No. Vi. 2655 relative to dimension of the *Cyprinus blicca* and the bream.—22 June 1962)

Provisions relative to the minimum dimensions of the above-mentioned fish suspended until 1 Jun. 1963.

New Zealand. Laws, Statutes, etc. (1961) F
8-07555
Statut. Rules N.Z., 1961/70 : 2 p.

The Rotorua trout fishing regulations 1960, amendment No. 1: Amendment No. 1 to the Rotorua trout fishing regulations 1960, made under the fisheries act, 1908.—21 June 1961

Extends the principal regulations for a further two years and restricts fly-fishing in parts of Tarawera River and Kaituna River.

New Zealand. Laws, Statutes, etc. (1961) F
8-07556
Statut. Rules N.Z., 1961/71 : 1 p.

Amendment No. 1 to the Taupo trout fishing regulations, 1960, made under the fisheries act, 1908.—21 June 1961

Ci 62-09513. Extends the principal regulations for a further two years.

New Zealand. Laws, Statutes, etc. (1961) F
8-07557
Statut. Rules N.Z., 1961/111 : 5 p.

Notice 1961 modifying the freshwater fisheries regulations (North Canterbury).—8 September 1961

In respect of bag limits, size limits, baits and open season.

New Zealand. Laws, Statutes, etc. (1961) F
8-07558
Statut. Rules N.Z., 1961/112 : 3 p.

Modification notice 1961 respecting the freshwater fisheries regulations (Marlborough and Nelson).—8 September 1961

In respect of bag limits, size limits, baits and open season.

New Zealand. Laws, Statutes, etc. (1961) F
8-07559
Statut. Rules N.Z., 1961/113 : 3 p.

Modification notice 1961 respecting the freshwater fisheries regulations (Ashburton).—8 September 1961

In respect of bag limits, size limits, baits and open season.

MISCELLANEOUS AND AUXILIARIES

F

New Zealand. Laws, Statutes, etc. (1961)

8-07560

Statut. Rules N.Z., 1961/114 : 2 p.

Modification notice 1961 respecting the freshwater fisheries regulations (Hawke's Bay).—8 September 1961

In respect of bag limits, size limits and baits.

F

New Zealand. Laws, Statutes, etc. (1961)

8-07561

Statut. Rules N.Z., 1961/115 : 3 p.

Modification notice 1961 respecting the freshwater fisheries regulations (South Canterbury, Waimate, and Waitaki).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F

New Zealand. Laws, Statutes, etc. (1961)

8-07562

Statut. Rules N.Z., 1961/116 : 3 p.

Modification notice 1961 respecting the freshwater fisheries regulations (Otago).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F

New Zealand. Laws, Statutes, etc. (1961)

8-07563

Statut. Rules N.Z., 1961/117 : 3 p.

Modification notice 1961 concerning the freshwater fisheries regulations (Southland).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F

New Zealand. Laws, Statutes, etc. (1961)

8-07564

Statut. Rules N.Z., 1961/118 : 3 p.

Modification notice 1961 concerning the freshwater fisheries regulations (Wellington).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F

New Zealand. Laws, Statutes, etc. (1961)

8-07565

Statut. Rules N.Z., 1961/125 : 4 p.

Amendment No. 8 to the southern lakes fishing regulations 1951.—27 September 1961

In respect of open season, baits, size limits, etc.

M

Norway. Laws, Statutes, etc. (1962)

8-07566

Norske Lovtid., (12) : 198

Resolusjon om endr. av § 11, annet ledd, i Kronprinsregentens resolusjon av 22. desember 1955 om bestemmelser om saltvannsfiskeriene.—23. mars 1962 (Resolution amending art. 11, para. 2, of the regent's resolution of 22 December 1955, governing fishing in salt water.—23 March 1962)

Prohibition to use any equipment to reduce net meshes.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Poland. Laws, Statutes, etc. (1962)

F
8-07567

Dziennik Ustaw, (34), Text 158 : 289-304

Ustawa z dnia 30 maja 1962 r. Prawo wodne (Water act.—30 May 1962)

Ci 61-10021. Very comprehensive text repealing and replacing *inter alia* the water act of 19 Sep. 1922 as amended, and the act relative to the protection of waters against pollution of 31 Jan. 1961. Contains numerous provisions dealing with water pollution, in particular chapter 2 of part 4, entitled "protection of water against pollution". Inland surface and ground-waters, waters of inland seas and the territorial sea are covered.

Poland. Laws, Statutes, etc. (1962)

F
8-07568

Dziennik Ustaw, (31), Text 149 : 257-60

Obwieszczenie prezesa rady ministrów z dnia 31 maja 1962 r. w sprawie ogłoszenia jednolitego tekstu rozporządzenia rady ministrów z dnia 22 maja 1958 r. w sprawie wykonania ustawy z dnia maja 1958 r. o popieraniu melioracji wodnych dla potrzeb rolnictwa (Notification relative to the publication of a consolidated text of the order regulating application of the act of 22 May 1958 concerning promotion of agricultural water improvements.—31 May 1962)

Percentages of participation, by land owners, in the cost of works, including the construction and renovation of fish ponds.

U.K. Laws, Statutes, etc. (1962)

F
8-07569

Statut. Instrum. U.K., (1751) : 2 p.

The river Taw mussel fishery order 1962.—3 August 1962

Confers rights of several or exclusive mussel fishery in part of the bed and foreshore of the river Taw.

U.S. Laws, Statutes, etc. (1962)

F
8-07570

Fed. Reg. U.S., (113) : 5540

CFR title 50—chapter 1—part 33: Sport fishing. Necedah national wildlife refuge, Wisconsin.—4 June 1962

Effective to 16 Sep. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

U.S. Laws, Statutes, etc. (1962)

F
8-07571

Fed. Reg. U.S., (118) : 5769

CFR title 50—chapter 1—subchapter C: National wildlife refuge system—part 33: Sport fishing. Klamath forest national wildlife refuge.—12 June 1962

Addition of one area (Oregon) where sport fishing is authorized.

MISCELLANEOUS AND AUXILIARIES

F
8-07572

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (128) : 6280-1

CFR title 36—chapter 1—part 1: General rules and regulations. Fishing in national parks.—27 June 1962

The purpose of the amendments is to permit the use of seines for procuring bait and to permit the use of minnows for bait in Big Ben national park.

F
8-07573

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (131) : 6431-2

CFR title 36—chapter 1—part 7: Special regulations relating to parks and monuments. Great Smoky Mountains national park, North Carolina and Tennessee; fishing.—6 July 1962

The purpose of the amendment to the above regulations is to close additional waters to general fishing and to provide special fishing streams for the exclusive use of children under age twelve.

F
8-07574

U.S. Laws, Statutes, etc. (1962)
Fed. Reg. U.S., (168) : 8616

CFR title 36—chapter 1—part 7: Special regulations relating to parks and monuments. Big Ben national park, Texas; fishing.—28 August 1962

The purpose of the amendment to the above regulations is to establish a suitable management program for the waters of the park in the interest of fish conservation.

F
8-07575

Yugoslavia. Laws, Statutes, etc. (1962)
Služb. List, (27), Text 532 : 512-5

Naredbu o osnovnim podacima investicionog programa koje investitori iz oblasti melioracije zemljišta, regulacije rijeka, zaštite od poplava i izgradnje ribnjaka dužni dostovljati organu uprave kotarskog narodnog odbora.—23 lipnja 1962 (Ordinance specifying the basic investment programme data which investors in the field of land improvement, river regulation, flood protection and fish pond construction are required to furnish to the administrative services of the district people's committee.—23 June 1962)

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Stebbins, G. L. (1962)
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International horizons in the life sciences

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Skellman, J. G. (1962)
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Co 8-02011.

- Worthington, L. V.** (1962) M
8-08002
Oceanus, 9 (1) : 21
'Erika Dan' cruise

Brief popular note on itinerary and objectives of cruise to the Labrador Sea and Davis Strait.

- Oshite, K.** (1961) M
8-08003
Inform. Bull. Planktol. Japan, 7 : 39-40
(Development of marine geology in Japan). *Ni*

- Komaki, Y.** (1962) M
8-08004
Inform. Bull. Planktol. Japan, 8 : 22-6
(Establishment of the Ocean Research Institute, University of Tokyo).
Ni En

Preliminary announcement of establishment of the institute, with list of chairs and main features of research vessel.

- Motoda, S.** (1962) M
8-08005
Inform. Bull. Planktol. Japan, 8 : 26-9
(International biological centre to be established in India). *Ni En*

Functions of the centre, responsibilities of its curator; list of Japanese experts desiring to examine planktonic and nektonic animals collected in the course of the Indian Ocean Expedition for which the centre will be established.

- Masuzawa, J.** (1962) M
8-08006
Oceanogr. Mag., 13 (2) : 119-21
Preliminary report of the Japanese Expedition of Deep-Sea, the fourth cruise, 1961 (JEDS-4)

Preliminary statement of area of investigation, observational programme, staff. Issued also as: *Contr. Jap. Exp. deep Sea*, (29). *Ci* 8-08043.

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France. Comité Central d'Océanographie et d'Étude des Côtes M
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(1962)
Cah. océanogr., 14 (10) : 683-771

Ci 8-08062, 8-08053, 8-08055, 8-08056. Contains sections on general information, technical notes, documentation received by secretariat, and tables and diagrams of observations.

France. Comité Central d'Océanographie et d'Étude des Côtes M
8-08008
Cah. océanogr., 14 (9) : 611-82

Ci 8-08054 and 8-08057. Contains sections on general information, technical notes, documentation received by secretariat, and tables and diagrams of observations.

IMCO (1962) M
8-08009
London, 93 p.

International conference on prevention of pollution of the sea by oil, 1962

Do 61-326me. Final act, amended 1954 convention, charts of prohibited zones; list of participants; form for oil record book; resolutions.

ICNAF (1962) M
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Annu. Proc. inst. Comm. Northw. Atlant. Fish., (12), 1961-1962 : 34 p.

Do 61-145me. Contains administrative report, financial statement, summaries of research by sub-areas, list of participants and agenda. Annual proceedings appears in form and with content different from that of preceding volumes. Summaries of researches by countries, which in previous years made up Part 3 are now published in the "Redbook" Part 2. Selected papers from Annual Meeting, in previous annual proceedings included in Part 4, are published in "Redbook" Part 3. List of scientists and laboratories engaged in commission's work, published every second year, is to be found in annual proceedings, Vol. 2.

Sim, J. S. (1962) M
8-08011
Bull. Fish. Coll. Pusan Univ., 4 (1/2) : 39-48
(Studies on accuracy of celestial fix, at fishing boats). Ni En

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8-08012
London, Academic Press, 479 p. Pogonophora

Centralized information source for the class Pogonophora. In part 1, general account, describes in detail external morphology and the general body plan, the integument and associated structures, musculature and papillae, nervous system and sense organs, the coelom and its derivatives—the excretory system, the blood-vascular system, the tentacular apparatus and external digestion, the reproductive system, embryological development, the tube, ecology, geographical distribution, systematic position of the Pogonophora and evolution within the class, methods of investigation. In part 2 systematic account gives a key for the determination of orders, families and genera; and describes with ill. spp. of genera *Oligobrachia*, *Nereilinum*, *Birsteinia*, *Siboglinum*, *Siboglinoides*, *Heptabrachia*, *Cyclobrachia*, *Diplobrachia*, *Zenkevitchiana*, *Polybrachia*, *Galathealimum*, *Sclerolimum*, *Lamellisabella* and *Spirobrachia*. Incl. key for the identification of spp. from their tubes. Appends systematic and subject indexes.

- Genka, T. & K. Tagucki** (1961) M
8-08013
Mem. Fac. Fish. Kagoshima, 10 : 102–17
(Study on the effects of time-difference measured by Loran at the fixed spot in Kagoshima). Ni En

- Hache, A.** (1962) MG
8-08014
Bull. Cent. Étud. Rech. Sci., Biarritz, 4 (1) : 67–76
Compte rendu résumé des journées d'études de la corrosion en atmosphère marine des matériaux métalliques. Principales discussions et conclusions (Summary and record of the meeting on corrosion of metallic materials in a marine atmosphere. Main discussions and conclusions)

- Anon.** (1962) MG
8-08015
New Scient., 16 (315) : 488–9
The submarine robot which helps the oil men

Short informative note announcing the use of a robot by the American Shell Company which could work on the ocean bed at 1,000 feet depth. It is operated by electro-hydraulic means. Has lights, television, sonar equipment and hydrophones.

- Anon.** (1962) MF
8-08016
Inform. Bull. Pacif. Sci. Ass., 14 (4)

Notes on: formation of Ocean Research Institute, Tokyo; Unesco meetings in Latin America; appointment of Serene as marine taxonomic expert in southeast Asia area; and establishment of a fisheries division in government of Fiji.

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Fish. Newslett. Aust., 21 (10) : 17
 Commonwealth-State Conference
 Main decisions of Commonwealth-State Fisheries Conference, 19-20 Sep., Sydney.
- Anon.** (1962) MF
8-08018
France Pêche, 7 (68) : 59
 Le futur laboratoire de Boulogne-sur-Mer (The future laboratory of Boulogne-sur-Mer)
 Short note on the new building for the laboratory for the French Scientific Institute for Marine Fisheries.
- Anon.** (1962) MF
8-08019
Proc. Indo-Pacif. Fish. Coun., 9 (1) : 1-299
 Proceedings of the Council in plenary meetings, and reports of its Technical Committee 1 on resources work, and of its Technical Committee 2 on work on craft and gear, food technology, and socio-economics, statistics and marketing.
- Australia. Commonwealth** (1964) MF
8-08020
Rep. gen. Assemb. U.N. Adm. Territ. Nauru, 1962-1963 : 98 p.
 Gives a description of the territory and its status. Reports international and regional relations, political, social and economical advancements. Lists publications. Incl. a chapter on fisheries.
- Anon.** (1962) MF
8-08021
Fish. Newslett. Aust., 21 (11) : 15-6, 20
 Minister's report on fisheries fund
 Report on expenditures from Australian fisheries development trust account, on pilot trawling enterprise in Great Australian Bight; tuna fishing in south-western Australia, training, and research on crayfish.
- Dentscheff, D.** (1961) F
8-08022
Dtsch. Fisch.-Ztg., 8 (8) : 239-40
 Der Staatliche Fischereibetrieb in Samokov, Bulgarien (The governmental fishing plant of Samokov, Bulgaria)
- Kumpf, W., B. Dieterich & J. Kumpf** (1960) F
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 München, R. Oldenbourg Verlag, 278 p.
 Radioaktive Substanzen und Wasser (Radioactive substances and water)
 Documentation based on the international meetings at Geneva (1955) and Cleveland (1955).

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Anon. (1962)

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8-08024

Eau, Paris, 49 (7) : 193

Revue des livres. Radioaktive Substanzen und Wasser (Book reviews.
Radioactive substances and water)

Re 8-08023.

Alaska. Department of Fish & Game (n.d. 1962)

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Progr. Rep. Alaska Dep. Fish Game, 1960-1961-1962 (12) : 77 p.

Co 61-12709. Reports the harvest and its value, research, development, regulatory management, support functions and activities and organizations. Gives landing statistics for important fish and shellfish. Lists scientific publications and films.

Ashbaugh, B. L. & M. Beuschlein (1960)

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8-08026

Educ. Ser. Md Dep. Res. Educ., (45) : 163 p.

Things to do in science and conservation

An elementary teaching manual incl. references to fisheries conservation and water use.

FAO (1962)

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Rome, mimeo : 14 p.

Report of the director-general of the Food and Agriculture Organization of the United Nations on the second regional conference for Africa which convened in Tunis on 1 November 1962

Do 61-308me. Lists delegations of member countries and organizations represented. Gives text of resolutions passed.

Barrington, E. J. W. (1962)

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Nature, Lond., 196 (4857) : 820-1

Comparative endocrinology in Europe

Short informative note on a Conference of European Endocrinologists held at the Zool. Soc., London during 19-21 Sep. Some discussions concerned the control of colour change in crustaceans, and the growth and moulting of crustaceans were discussed as well as the pituitary gland, the neurohypophyseal hormones, modes of action of hormones and the sex hormones.

Anon. (1961)

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Zool. Mag., Tokyo, 71 (1/2) : 1-64

(Proceedings of the thirty-second annual meeting of the Zoological Society of Japan). *Ni*

Appears to be abstracts of papers presented.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

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- Reid, J. L., Jr.** (Edit.) (1960)
Berkeley, University of California Press
Oceanic observations of the Pacific 1955. The NORPAC atlas

Physical, chemical and biological data collected during the NORPAC cruises—maps of temperature, salinity, dissolved oxygen, inorganic phosphate-phosphorus, thermocline anomaly, geopotential anomaly, zooplankton, fish larvae, whales and porpoises.

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- Holmes, R. W. & M. Blackburn** (1960)
Spec. sci. Rep. U.S. Fish Wildl. Serv.—Fish., (345) : 109 p.
Physical, chemical and biological observations in the Eastern Tropical Pacific Ocean Scot expedition, April–June 1958

WFA 14 (1) : 14-1075. Describes methods used and lists in tabular form the results obtained. The main object of the expedition was to study the distribution of ocean properties in the region as a whole at a different season and with greater coverage than in any former expedition.

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- Kawai, H. & M. Sasaki** (1961)
Bull. Tohoku Fish. Res. Lab., 19 : 119-34
An example of the short-period fluctuation of the oceanographic condition in the vicinity of the Kuroshio front. Ni

Changes in water mass distribution; horizontal distribution of phosphate-phosphorus, phytoplankton and zooplankton and changes in these with time in the respective moving water masses; discussion of the shift of the skipjack fishing ground in accordance with change in hydrographic conditions.

- M
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- Fallar, A. J.** (1962)
Oceanus, 9 (1) : 3-11
Atmospheric model studies

Popular account of experiments with a large rotating model basin in which circulation patterns are simulated.

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- Bowin, C.** (1962)
Oceanus, 9 (1) : 22-3
A new system for the automatic measurement of gravity at sea

Brief note describing equipment on R.V. 'Chain'.

- Kitamura, H.** (1962) M
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Bull. Kobe Mar. Obs., 168 : 40-94
 (Marine chemical studies on the phosphorus distributed in the North Pacific Ocean). *Ni En*

Study of phosphate phosphorus: vertical distribution, relation with inorganic silicon and nitrogen compounds; comparison of total phosphate in these waters with those in North Atlantic; particulate phosphate; characterization of sea waters in terms of phosphorus/salinity relation.

- Anon.** (1962) M
8-08036
Bull. Kobe Mar. Obs., 168 : 1-39
 (The results of the marine meteorological observations on board the 'Shumpu Maru' in the Harima Nada (from Jan. 18th to Feb. 6th, 1961). *Ni En*

Analysis of data on wind and wave. With respect to wind: vertical profile over the sea, relation of observed wind with geostrophic wind, variations of velocity; to wave: distribution, effects of islands, shallows and tidal currents generation and dissipation, comparison of observed with predicted height, sea state and wave height.

- Yasui, M. & T. Nan'niti** (1962) M
8-08037
Oceanogr. Mag., 13 (2) : 133-6
 Ill. deep sea current measurement during the JEDS-4

Measurement by means of neutral buoyancy float. Issued also as: *Contr. Jap. Exp. deep Sea*, (37).

- Nasu, N. & T. Sato** (1962) M
8-08038
Oceanogr. Mag., 13 (2) : 155-66
 7. Geological results in the Japanese Deep Sea Expedition in 1961 (JEDS-4)

Description of bottom topography; nature of bottom materials found. Issued also as: *Contr. Jap. Exp. deep Sea*, (35), *Coll. Repr. Ocean Res. Inst.*, Univ. Tokyo, 1 : Contr. 6, 1962. Ci 8-08159.

- Uyeda, S. et al.** (1962) M
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Oceanogr. Mag., 13 (2) : 167-83
 8. Report on geomagnetic survey during JEDS-4 cruise

General contour lines of equal total field intensity, variation in total force, and its distribution around a sea mount; tables of observations. Issued also as: *Contr. Jap. Exp. deep Sea*, (36). Ci 8-08038.

- Takenouti, Y., T. Nan'niti & M. Yasui** (1962) M
8-08040
Oceanogr. Mag., 13 (2) : 89-101
 The deep-current in the sea east of Japan

Study by means of neutral-buoyancy float; tidal effect on deep current and the energy dissipation in the mean current are dealt with. Issued also as: *Contr. Jap. Exp. deep Sea*, (28).

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- Masuzawa, J., T. Tsuchida & T. Inoue** (1962)
Oceanogr. Mag., 13 (2) : 77-87
 The monthly mean sea-surface temperature in the northwestern Pacific
- Monthly charts of mean temperature, also charts of mean value between maximum and mean, and of range.
- M
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- Miyazaki, M., S. Unoki & T. Ueno** (1962)
Oceanogr. Mag., 13 (2) : 103-17
 Theoretical investigations of typhoon surges along the Japanese coast (2)
- Deals with rotational cases, for large basins in which Corioli's terms become important. The computer programme is given and charts are presented of the computed horizontal distribution of surges and of wind driven currents in the case of two typhoons, to compare computed with observed values.
- M
8-08043
- Masuzawa, J. & H. Akamatsu** (1962)
Oceanogr. Mag., 13 (2) : 122-30
 1. Hydrographic observation during the JEDS-4
- Station list (depth, T, Cl, O₂, P, Si, pH, CO₂, discussion of results on T, salinity and geostrophic current. Ci 8-08045.
- M
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- Takano, K.** (1962)
J. oceanogr. Soc. Japan, 18 (2) : 59-67
 Circulation générale permanente dans les océans—un calcul numérique complémentaire (Stationary general circulation in the oceans—a complementary numerical calculation). En
- Development of previously presented formulae, based on several assumptions, by removing the assumption that the friction due to horizontal eddy viscosity is proportional to the horizontal velocity.
- M
8-08045
- Miyake, Y. et al.** (1962)
Oceanogr. Mag., 13 (2) : 131-2
 2. Chemistry in the Japanese Expedition of Deep Sea (JEDS-4)
- Brief discussion of vertical distribution of dissolved O₂, phosphate-P and silicate Si. Issued also as: *Contr. Jap. Exp. deep Sea*, (30). Ci 8-08043.
- M
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- Kajiura, K.** (1962)
J. oceanogr. Soc. Japan, 18 (2) : 49-58
 A note on the generation of boundary waves of Kelvin type
- The generation of Kelvin waves along a straight boundary due to the reflection of cylindrical waves is studied in a rotating sea of constant depth. The result is applied to the discussion of an internal wave of Kelvin type generated by an atmospheric disturbance.

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- Iwata, N.** (1962) M
8-08047
J. oceanogr. Soc. Japan, 18 (2) : 69-72
 Effekt der Meeresströmung auf interne Wellen im offenen Meer (Effect of current on internal waves in the open sea). En
 Characteristics equation, phase velocity of internal waves and continuous depth distribution.
- Nan'niti, T.** (1962) M
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J. oceanogr. Soc. Japan, 18 (2) : 73-7
 Deep-sea current measurements
 Estimate of eddy diffusion at deep sea bottom and measurements of deep currents in the western North Pacific.
- Hishida, K.** (1962) M
8-08049
J. oceanogr. Soc. Japan, 18 (2) : 79-84
 On the variation of the turbidity in the sea water (1)
 Examination of relation between turbidity and meteorological conditions, water temperature and density.
- Dunn, G. E. & B. I. Miller** (1960)* M
8-08050
 Baton Rouge, La St. Univ. Press, 326 p.
 Atlantic hurricanes
- Carbonnel, J.-P.** (1962) M
8-08051
Nature, Paris, (3331) : 475-81
 Une science et un art: la topographie sous-marine. Comment fut établie la carte de la Méditerranée occidentale (A science and an art: marine topography. How the western Mediterranean chart was established)
 Popular article reviewing the history and methods used in the preparation of the Bourcart (and his collaborators) chart.
- Bianucci, G. & G. De Stefani** (1962)* M
8-08052
Acqua industr., 4 (17) : 14-22
 The physical chemistry of sea water
- Legand, M. & H. Rotschi** (1962) M
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Cah. oceanogr., 14 (10) : 703-18
 Bilan des recherches océanographiques françaises en Mer du Corail entre 1956 et 1961 (Review of the French oceanographic research in the Coral Sea between 1956 and 1961)
 Review of results of the cruises of the 'Orsom III' and 'Tiare' and summary of the main conclusions on water mass movement, physical and chemical pattern and their relations to qualitative and quantitative plankton distribution in the area.

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Berrit, G. R. (1962)

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Cah. océanogr., 14 (9) : 633-43

Contribution à la connaissance des variations saisonnières dans le golfe de Guinée. Observations de surface le long des lignes de navigation. 2ème partie: Étude régionale (Contribution to the knowledge of the seasonal variations in the gulf of Guinea. Surface observations along the navigation lines. 2nd part: Regional study)

Co 62-06407.

Berrit, G. R. (1962)

M
8-08055

Cah. océanogr., 14 (10) : 719-29

Contribution à la connaissance des variations saisonnières dans le golfe de Guinée. Observations de surface le long des lignes de navigation. 2ème partie: Étude régionale. (Suite et fin) (Contribution to the knowledge of the seasonal variations in the gulf of Guinea. Surface observations along the navigation lines. 2nd part: Regional study. (Continuation and end))

Co 62-06407 and 8-08054. Zones of upwelling and off-shore observations.

Anon. (1962)

M
8-08056

Cah. océanogr., 14 (10) : 739-47

Résultats d'observations (Results of observations)

Tables of data and diagrams. Contains: 1. Hydrological observations of the meteorological ship 'France 1', from Oct. to Dec. 1960 in station 1 (44° 50' N-15° 59' W); 2. Recoveries of drift cards for the study of surface currents; 3. Tide observations at Dakar (first half 1960).

Anon. (1962)

M
8-08057

Cah. océanogr., 14 (9) : 673-82

Résultats d'observations (Results of observations)

Tables of data and diagrams. 1. Oceanographic surface observations. 2. Observations of sea level at the I.G.Y. coastal station at Nosy-Be (Madagascar).

Longhurst, A. R. (1962)

M
8-08058

Bull. Inst. franç. Afr. noire, 24 (3) : 633-63

A review of the oceanography of the gulf of Guinea. Fr

Based on previously published work and original research in progress at Lagos. Refers to the meteorology, water masses and movement, troposphere, distribution of oxygen and phosphates, biological oceanography in the area.

- Silvester, R.** (1962) M
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Nature, Lond., 196 (4857) : 819-20
 Coastal processes

Short informative note on the Seminar on Coastal Processes held at the Department of Geography, University of Cambridge, 29-30 Jun. Discussions concentrate on wave generation as it affects sediment movement; beach processes, in the surf zone and beyond; beach cycles, annual and long term; equilibrium shapes of coastline in plan; world-wide sediment movement.

- Hamon, B. V.** (1962) M
8-08060
Fish. Newslett. Aust., 21 (11) : 21-3
 The east Australian current

Popular account of structure and behaviour of this current.

- Koh, K. S. & K. H. Cho** (1962) M
8-08061
Bull. Fish. Coll. Pusan Univ., 4 (1/2) : 49-58
 (Current condition of Pusan Harbor). Ni

- Murray, M. T.** (1962) MG
8-08062
Cah. océanogr., 14 (10) : 693-702
 Tide prediction with an electronic digital computer

- Swain, A. & O. F. Newman** (1962) MF
8-08063
Fish. Invest. Lond. (I), 6 (3) : 45 p.
 Hydrographical survey of the river Tyne

An account of the surveys carried out between 1951 and 1957 with special reference to the discharge into the estuary of heated water from a power station.

- Watanabe, N.** (1962) MF
8-08064
Bull. Tokai Fish. Res. Lab., 32 : 123-30
 (On the fall of chlorinity of sea-water due to flowing of land-water). Ni
 En

Attempt to simplify the equation of continuity and to obtain numerical values for its constants.

- Okubo, K. & T. Okubo** (1962) MF
8-08065
Bull. Tokai Fish. Res. Lab., 32 : 131-40

Study on the bioassay method for the evaluation of water pollution. 2. Use of the fertilized eggs of sea urchins and bivalves). Ni En

Description of the procedure and presentation of results in comparison with other methods of bioassay.

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Rivière, A. & S. Vernhet (1962)

MF
8-08066

C.R. Acad. Sci., Paris, 255 (22) : 3013-5

Régime euxinique et sédimentation carbonatée en milieu lagunaire
(Euxinic regime and carbonated sedimentation in a lagoon environment)

Report of observations on the small ponds produced by the accumulation of *Ruppia* in the littoral lagoons of the French Mediterranean coast.

Pearson, E. A. (1961)*

MF
8-08067

Engng J., Montreal, 44 (11) : 63-8

Marine waste disposal

Richard, C. (1962)

MF
8-08068

Eau, Paris, 49 (6) : 159-64

Hiệp-Hoà. Une curiosité hydrologique du sud Viet-Nam (Hiệp-Hoà.
An hydrological curiosity in south Viet-Nam)

Short note on the hydrological situation in Hiệp-Hoà (near Saigon) and the characteristics of the western Vaico resulting from the influence of rain water from meteoric origin, brackish water of marine origin and acid water from the reed plain.

Anon. 1961)*

MF
8-08069

J. Brit. Waterwks Ass., 43 (361) : 644-6

Fresh water from the sea—new American plant cuts conversion costs

Miller, H. J. (1962)

MF
8-08070

Wat. & Sewage Wks, 109 (1) : 44-5

Sea water conversion plant uses Cornell process

Contains data on a plant on Weedon island in Florida.

R.C. (1962)

MF
8-08071

Eau, Paris, 49 (6) : 158

Application du procédé Cornell pour le dessalement de l'eau de mer (Sea water conversion plant uses Cornell process)

Re 8-08070.

Gavrilescu, N. & V. Popescu (1962)

MF
8-08072

Stud. Cercet. Biol. (anim.), 14 (4) : 517-28

Influența vecinătății Mării Negre asupra variațiilor de salinitate ale brațului Sulina (Influence of the proximity of the Black Sea on the variation of salinity of the water of the Sulina arm). Ro Ru Fr

Reports results of observations in 1960-61 and discusses the effect of various physical factors on salinity variation.

- Bainbridge, V.** (1962) MF
Bull. Inst. franç. Afr. noire, 24 (1) : 262-9 8-08073
 The larvae of *Pellonula vorax* Günther (Clupeidae) in Sierra Leone coastal waters

The larvae are described and identified.

- Impens, I. & J. Schalck** (1962) MF
Meded. Lab. Plantecol. Rlandbhogesch. Ghent, 3 : 21-55 8-08074

(The use of a multiple regression to represent the influence of temperature, wind-velocity, atmosphere pressure, saturation deficit, insolation and radiation on the evaporating power of the air). *Ne*

BAgr. 26 (10) 78292.

- Balasubrahmanyam, K.** (1961) MF
J. zool. Soc. India, 13 (2) : 166-9 8-08075

Studies in the ecology of the Vellar Estuary. 2. Phosphates in the bottom sediments

Variation with location and time. Co 61-08571.

- Shimizu, C. & H. Matsuoka** (1962) MF
Bull. Fac. Fish. Nagasaki, 12 : 78-82 8-08076

(On the organic matter contained in the so-called 'Nuta' (fine attached mud)). *Ni*

Variations in C and N content of muds.

- Andreae** (1961) F
Dtsch. Fisch.-Ztg., 8 (8) : 235-8 8-08077

Möglichkeiten der Hydrologie zur Unterstützung der Fischerei (Hydrology and its possibilities in supporting fisheries)

- Geyer, R.** (1961) F
Dtsch. Fisch.-Ztg., 8 (10) : 301-2 8-08078

Die neue, verbesserte Farbenskala nach Prof. Dr. Hofer, ein Hilfsmittel zum Schätzen der im Wasser gelösten Sauerstoffmenge (The new, improved colour scale according to Prof. Dr. Hofer, an aid for estimating the amount of oxygen dissolved in water)

- Bolton, P.** (1961)* F
J. Amer. Wat. Wks Ass., 53 (10) : 1243-50 8-08079
 Prevention of water source contamination

- Genet, E. & R. Rohmer** (1962) F
Eau, Paris, 49 (4) : 106-12 8-08080

Correction et déminéralisation des eaux par les résines échangeuses d'ions (Correction and demineralisation of water by resin exchanging ions)

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Genet, E. & R. Rohmer (1962)

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8-08081

Eau, Paris, 49 (5) : 130-7

Correction et déminéralisation des eaux par les résines échangeuses d'ions
(Correction and demineralisation of water by resin exchanging ions)

Co 8-08080.

Devlaminck, F. (1961)

F

8-08082

Bull. CEBEDEAU, 2 (52) : 88-114

Rapport sur une croisière d'étude du Danube (Report on a research cruise on the Danube)

Describes the physical, chemical and biological features of the river and gives an estimation of the degree of pollution.

Wormser, G. (1962)

F

8-08083

Eau, Paris, 49 (2) : 51-4

Expérience de décontamination de liquides radioactifs par voie biologique
(Experiments on the decontamination of radioactive liquids by biological treatment)

Report on results using a bacterial bed.

Taylor, E. W. (1961)

F

8-08084

J. Brit. Waterwks Ass., 43 (360) : 543-59

Fifty years of water treatment and examination

Reviews the evolution of techniques and methods.

Anon. (1961)*

F

8-08085

Gaz. off. Pêche, 4 (107) : 9-10

Études comparées des législations étrangères en matière de pollution des cours d'eau (Comparative study of foreign law on matters concerning the pollution of water)

Klein, L. (1961)*

F

8-08086

Effl. Wat. Treatm. J., 1 (3) : 149-53

Effluent treatment and river pollution—future prospects

Paris-Teynac, E.-J. (1962)

F

8-08087

Bull. Inst. franç. Afr. noire, 24 (1) : 54-68

Contribution à la connaissance du fleuve Sénégal (Contribution to the knowledge of the Senegal River)

Study on the periodicity of the floods.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

- Bonde, A. N., J. D. Ives & D. B. Lawrence** (1961) F
8-08088
Proc. Minn. Acad. Sci., 29 : 190-8
 Ecosystem studies at Cedar Creek natural history area. 3. Water use studies
 BAgr. 26 (10) 77304.
- Christensen, E. M. & B. F. Harrison** (1960/61) F
8-08089
Proc. Utah Acad. Sci., 38 : 36-49
 Ecological study area at Lily Lake in the Uinta Mountains, Utah
 BAgr. 26 (10) 77307.
- Flaxman, E. M.** (1962) F
8-08090
Min. Inter-Ag. Comt. U.S. Pacif. S. West., (62-1) : 23-7
 Relation of upstream sediment production to sediment yield in intermediate sized watersheds
 BAgr. 26 (10) 78930.
- U.S. Department of Health Education & Welfare** (1962) FG
8-08091
Radiol. Hlth Data, 3 (9) : 311-78
 Contains section on 'water' tabulating data for the month September 1962 for radioactivity in raw surface waters; also global integrals of fallout.
- U.S. Department of Health Education & Welfare** (1962) FG
8-08092
Radiol. Hlth Data, 3 (5) : 137-71
 Contains section on 'water' tabulating data for the month May 1962 for radioactivity in raw surface waters; also global integrals of fallout, etc.
- Fontaine, P.** (1962) FG
8-08093
Eau, Paris, 49 (12) : 322-8
 La sécheresse de l'été 1962—aspects hydrométéorologiques (The drought of summer 1962—hydrometeorological aspects)
 Contains and discusses the regional climatic characteristics in France and their relation to the atmospheric currents and general meteorological conditions.
- Anon.** (1962) FG
8-08094
New Scient., 16 (315) : 503
 On-the-spot water testing
 Short note. Baird and Tatlock, London, E.C.1, have developed a portable polarograph to test on the bank the amount of dissolved oxygen in the water in ornamental lakes and ponds.

PLANKTON

Jeuniaux, C. (1962)M
8-08095*Cah. Biol. mar.*, 3 : 391-400Digestion de la chitine chez les actiniaires (Coelentérés Anthozoaires)
(Digestion of chitin by sea-anemones—(Coelenterata Anthozoa). En It

High amounts of chitinases and chitobiasis have been found in the gastroderm of *Adamsia palliata*, *Anemonia sulcata*, *Anthopleura balli*, *Edwardsia callimorpha*. The chitinolytic activities are as high as those of the gastric mucosa of some insectivorous vertebrates.

de Diaz, E. N. L. (1961)M
8-08096*Darwiniana*, 12 (2) : 191-202

(Algae of continental waters of Argentina; phytoplankton of Ibicuy (Entre Rios)). Es

BAgr. 26 (5) 32911.

Hoshiai, T. & M. Kato (1961)M
8-08097*Bull. Mar. biol. Sta. Asamushi*, 10 (4) : 221-30

Ecological notes on the diatom community on the sea ice in Antarctica

Vertical distribution of diatoms in coloured ice and quantity of diatoms in seawater below the ice, and species composition of communities in various successions. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (285).

Kikuchi, S. et al. (1961)M
8-08098*Bull. Tohoku Fish. Res. Lab.*, 19 : 164-70

(On the distribution of oyster larvae in Sendai Bay). Ni En

Survey of larvae distribution and environmental conditions.

Odate, S. (1961)M
8-08099*Bull. Tohoku Fish. Res. Lab.*, 19 : 98-108

(Study on the larvae of the fishes in the northeastern sea area along the Pacific coast of Japan). Ni En

Distribution in space and time and its relation with water temperature; body-length; size of mature ova.

Satomy, Y. (1961)M
8-08100*Inform. Bull. Planktol. Japan*, 7 : 37

(Improved method for permanent preparation of phytoplankton specimens with the aid of a membrane filter). Ni En

Description of the method.

PLANKTON

- Omori, M.** (1961) M
8-08101
Inform. Bull. Planktol. Japan, 7 : 34-5
 (Trial tow with high-speed underway plankton catcher, models 5 and 6).
Ni En

Comparative table of collections made with the two models.

- Motoda, S.** (1961) M
8-08102
Inform. Bull. Planktol. Japan, 7 : 11-34
 (Programme of the International Indian Ocean Expedition, particularly on the biological programme). *Ni En*

List of participating organizations, composition of SCOR, its sub-committees, expedition plans and plankton equipment and sampling programme.

- Saijo, Y.** (1961) M
8-08103
Inform. Bull. Planktol. Japan, 7 : 8-11
 (Methods of measurement of primary production in the sea by ^{14}C technique).
Ni En

- Nemoto, T.** (1962) M
8-08104
Inform. Bull. Planktol. Japan, 8 : 3-5
 (Some curious diatoms in the sea). *Ni En*

Some taxonomic considerations and discussion of nutritional mechanism.

- Tokioka, T.** (1962) M
8-08105
Inform. Bull. Planktol. Japan, 8 : 5-11
 (The outline of the investigations made on chaetognaths of the Indian Ocean). *Ni En*

List of 32 relevant papers and discussion of some aspects of the zoogeography of this group.

- Seno, J.** (1962) M
8-08106
Inform. Bull. Planktol. Japan, 8 : 12-4
 (Plankton collected by the 'Umitaka Maru' in the Indian Ocean). *Ni En*

Collections by vertical tow-netting (150-0 m) with 'Marutoku' net and a closing net, as well as surface hauls with larva net in region from off Sunda Strait through Nazareth Bank to Cape Town.

- Motoda, S.** (1962) M
8-08107
Inform. Bull. Planktol. Japan, 8 : 30-40
 (Specifications of zooplankton standard net to be used in the International Indian Ocean Expedition, and a design of closing net). *Ni En*

Ill. description of the net and directions for its use, with suggestions for other plankton collecting operations.

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Motoda, S. (1962)

M
8-08108

Inform. Bull. Planktol. Japan, 8 : 40-53

(Proposed biological apparatus and methods to be used on Japanese ships in the International Indian Ocean Expedition). Ni En

Methods for visual observations, measurement of primary production and chlorophyll, sampling of microplankton, plankton net hauls, and bacteriological observations; suggested working schedule on board. *Pro forma* record sheets.

Watson, M. (1962)

M
8-08109

Oceanus, 9 (1) : 19-20

Tuna larva

An X-ray technique makes it possible to distinguish larva of various tuna species.

Matsue, Y. et al. (1962)

M
8-08110

Oceanogr. Mag., 13 (2) : 137-41

4. Mid-water animals collected on the JEDS-4

Table of numbers of plankton animals collected. Issued also as: *Contr. Jap. Exp. deep Sea*, (32). Ci 8-08045.

Taga, N. & F. Seki (1962)

M
8-08111

Oceanogr. Mag., 13 (2) : 143-7

5. Preliminary report on the microbiological survey made during the fourth cruise of the Japanese Deep Sea Expedition (JEDS-4)

Vertical distribution of heterotrophic microorganisms. Issued also as: *Contr. Jap. Exp. deep Sea*, (33). Ci 8-08110.

Argua, Y. & M. Monsi (1962)

M
8-08112

J. oceanogr. Soc. Japan, 18 (2) : 85-94

Primary production in the northwestern part of the Pacific off Honshu, Japan

Distribution of chlorophyll, light-photosynthesis relations, primary production and nutrient supply.

Repelin, R. (1962)

M
8-08113

Bull. Inst. franç. Afr. noire, 24 (3) : 664-76

Une nouvelle scyphoméduse bathypélagique: *Atolla russelli*, n. sp. (A new bathypelagic Scyphomedusa: *Atolla russelli*, n. sp.)

Describes a n. sp. collected during a cruise of the 'Ombango' off the Angola coast.

PLANKTON

- McLeod, G. C. & J. Kanwisher** (1962) M
8-08114
Physiol. Plant., 15 (3) : 581-6

The quantum efficiency of photosynthesis in ultraviolet light

The marine flagellate, *Dunaliella tertecolata*, and the diatom, *Phaeodactylum tricornutum* were used in experiments to determine whether the near ultraviolet radiations have a deleterious effect on the plant pigments or whether they may be used for photosynthesis in the same way as blue or violet light.

- Lacroix, G.** (1962) M
8-08115
Actualités mar., 6 (1) : 11-20

Un aliment controversé: Le zooplancton marin (A controversial food: Marine zooplankton)

Popular review of the possible utilization of plankton as a food source for man.

- Tranter, D. J.** (1962) M
8-08116
Aust. J. Mar. Freshw. Res., 13 (2) : 106-42

Zooplankton abundance in Australasian waters

Values for biomass, given as milligrams (wet weight) per cubic metre of seawater filtered, sampled by Clarke-Bumpus sampler, at oceanic and continental-shelf stations. The results are compared with results obtained with other samplers, in other investigations, and in other areas.

- Mito, S.** (1962) M
8-08117
Sci. Bull. Fac. Agric. Kyushu, 19 (4) : 493-502
(Pelagic fish eggs from Japanese waters.—6. Labrina). *Ni En*

Description and figures of egg development and hatched larvae of 22 spp. belonging to the suborder Labrina. Co 8-05092.

- Krishnamurthy, K.** (1961) M
8-08118
J. zool. Soc. India, 13 (2) : 180-7

Daily variations in marine plankton from Porto Novo, S. India

Variation from day to day, and between months, and relation between abundance of diatoms and that of copepods.

- Mito, S.** (1962) M
8-08119
Sci. Bull. Fac. Agric. Kyushu, 19 (4) : 503-6
(Pelagic fish eggs from Japanese waters.—7. Chaetodontina, Balistina and Ostracientina). *Ni En*

Description and figures of eggs and larvae of 5 spp. belonging to the suborders Chaetodontina, Balistina, and Ostracientina. Co 8-08117.

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- Tanaka, O.** (1962) M
8-08120
Publ. Seto Mar. biol. Lab., 10 (1) : 35-90
 The pelagic copepods of the Izu region, middle Japan, systematic account.
 8. Family Scolecithricidae. Part 2

Ill. description of 26 spp. (of which 8 are new), assigned to 2 genera.
 Co 61-13249.

- Roosen-Runge, E. C.** (1962) M
8-08121
Pacif. Sci., 16 (1) : 15-24
 On the biology of sexual reproduction of Hydromedusae, genus *Phialidium*
 Leuckhart

Observations on living and histological material, simple experiments with
 photostimulus, and sperm counts, made in an attempt to analyse some of
 the factors that ensure the high reproductive capacity of Hydromedusae.

- Kramp, P. L.** (1962) M
8-08122
Pacif. Sci., 16 (1) : 25-9
 Notes on some eastern Pacific species of *Phialidium* (Leptomedusae)
 Morphological notes and comparison with other spp.

- Toyosima, T., H. Honda & H. Irie** (1962) M
8-08123
Bull. Fac. Fish. Nagasaki, 12 : 20-6
 (A study on the plankton of the Banda Sea and its neighborhood). *Ni*
En

Tabulations of spp. taken and measurements of cell-size of main spp. in
 each region.

- Manuilova, E. F.** (1962) MF
8-08124
Biull. mosk. Obshch. Ispyt. Prir. (biol.), 67 (1) : 128-31
 (The influence of the blue and green algae on the development of the zoo-
 plankton). *Ru*
 BAgr. 26 (8) 59296.

- Murakami, A.** (1961) MF
8-08125
Inform. Bull. Planktol. Japan, 7 : 38-9
 (Plankton studies related to pollution in estuaries and inshore water).
Ni En

Plankton observations, additional to normal physical, chemical and plankton
 observations to be made as a means of estimating degree of pollution.

PLANKTON

- Rajvalakshmi, T.** (1961) MF
8-08126
J. zool. Soc. India, 13 (2) : 220-37
Larval development of *Palaemon lamarrei* H. M. Edw. and *Leander fluminicola* Kemp

Ill. description.

- Fraser, J.** (1962) MF
8-08127
London, G. T. Foulis & Co. Ltd., 178 p.
Nature adrift—The story of marine plankton

Account of the plankton around the British Isles; only passing references are made to the tropics, the ocean depths or higher latitudes. The book begins with an elementary introduction which is followed by a description of plankton apparatus and methods. Five chapters survey the plants and animals of the plankton. Last chapters include descriptions of plankton behaviour and distribution, and of the use of indicator species in interpreting water movements on a wide geographical scale, and the effects of these movements on the fisheries off Scotland and in the North Sea. The last chapter discusses the possible use of plankton as a source of food for man.

- Colman, J. S.** (1962) MF
8-08128
Nature, Lond., 196 (4857) : 858
Scottish and other plankton

Re 8-08127.

- Satomi, Y.** (1961) F
8-08129
Bull. Freshw. Fish. Res. Lab., Tokyo, 11 (2) : 1-9

Untersuchungen über die Remineralisation des Phosphors und Stickstoffs im Phytoplankton, insbesondere in Bezug auf Alkalinität der Medien und andere Milieufaktoren (Studies of the remineralisation of phosphorus and nitrogen in phytoplankton, especially in relation to the alkalinity of the medium and other factors of the environment). Ni De

Experiments with pure cultures of *Scenedesmus obliquus*. Measurement of autolytic and respiratory remineralization at various alkalinities, with and without aeration.

- Rajasekarasetty, M. R. & A. R. K. Bai** (1961) F
8-08130
J. zool. Soc. India, 13 (3) : 238-9

On the occurrence of a new species of hypotrichous ciliate *Gastrostyla Engelmann*

Ill. description of *Gastrostyla hebballica* n. sp.

Vuxanovici, A. (1962)F
8-08131*Stud. Cercet. Biol. (anim.)*, 14 (3) : 331-49

Contribuții la sistematica ciliatelor (nota 2.) (Contribution to the systematics of Ciliata (note 2.)). Ro Ru Fr

Co 62-06452. Describes a new genus *FUNDENIA* and n. spp. of *Spathidium*, *Lionotus*, *Dileptus*, *Nassula*, *Ophryoglena*, *Paramecium*, *Colpidium*, *Lembus*, *Cyclidium*, and *Metopus*.**Vuxanovici, A. (1962)**F
8-08132*Stud. Cercet. Biol. (anim.)*, 14 (4) : 549-73

Contribuții la sistematica ciliatelor (nota 3.) (Contribution to the systematics of Ciliata (note 3.)). Ro Ru Fr

Co 62-06452 and 8-08131. Rediscusses and gives drawings of species collected, including various new species.

Willén, T. (1962)F
8-08133*Oikos, Suppl.* 5 : 156 p.

The Utäl Lake chain central Sweden and its phytoplankton

Aims to give a general description of the lakes; to follow the seasonal distribution of phytoplankton, recording and counting the most common algae; to illustrate the specific conditions prevailing in the recently isolated lakes, comparing these with true freshwater lakes, and to give some physical-chemical and other data to explain the prevailing conditions.

Baily, I. A. E. (1962)F
8-08134*Aust. J. Mar. Freshw. Res.*, 13 (2) : 143-97Ecological studies on New Zealand lacustrine zooplankton with special reference to *Boeckella propinqua* Sars (Copepoda: Calanoida)Study of zooplankton of a small, warm monomictic, closed, alkaline lake on an off-shore island of North Island, New Zealand; morphometric, thermometric and chemical aspects of the lake; vertical distribution of zooplankton; size composition, sex ratio and other aspects of *Boeckella* population.

BENTHOS

Bang, F. (1962)M
8-08135*Cah. Biol. mar.*, 3 : 363-74

Studies on sipunculid blood: immunologic properties of coelomic fluid and morphology of 'urn cells'. De

Phascolosoma (Goldfingia) gouldii and *Sipunculus nudus* coelomic fluid is sterile and capable of destroying massive concentrations of bacteria. New information on the structure of the bicellular urns are presented.

- Bobin, G. & M. Prenant** (1962) M
8-08136
Cah. Biol. mar., 3 : 375-89
 Les espèces françaises du genre *Conopeum* Gray. (Bryozoaires Chilostomes)
 (The French species of the genus *Conopeum* Gray (Bryozoa Chilostomata)).
 En De
 Presents morphological arguments to distinguish *M. seurati* from *Conopeum reticulum* from Channel coasts.
- Stoll, C.** (1962) M
8-08137
Cah. Biol. mar., 3 : 401-15
 Cycle évolutif de *Paragnathia formica* (Hesse) (Isopode-Gnathiidae)
 (Evolutive cycle of *Paragnathia formica*—Isopoda-Gnathiidae). En De
 Seasonal rhythm of female metamorphosis and the differences between
 male and female biological cycle depends on the temperature variations.
- Levi, C.** (1963) M
8-08138
C.R. Acad. Sci., Paris, 256 (2) : 497-8
 Scléroblastes et spiculogénèse chez une éponge siliceuse (Scleroblasts
 and spiculogenesis in a silicious sponge)
 Preliminary note describing the process in *Mycale contarenii*.
- Streiff, W. & A. Peyre** (1963) M
8-08139
C.R. Acad. Sci., Paris, 256 (1) : 292-4
 Survie, en culture *in vitro*, d'organes de *Calyptraea sinensis* L. (Mollusque
 prosobranch) (Survival, in *in vitro* culture, of organs of *Calyptraea sinensis*
 L. (Mollusca Prosobranchiata))
 Preliminary note, reporting results of experiments.
- Baardsath, E. & B. Grenager** (1961) M
8-08140
Rapp. norsk Inst. Tang- o. Tareforsk. : 25-39
 A method of assessing seaweed quantities
 BAgr. 26 (8) 59226.
- Dau, L.** (1960) M
8-08141
Arg. Mus. nac., Rio de J., 50 : 79-133
 (Microlimates of the restingas of southeastern Brazil. 1. Inland restinga
 of Cabo Frio). Pr En
 BAgr. 26 (8) 59247.
- Ardré, F.** (1960) M
8-08142
Rev. gén. Bot., 77 (798) : 541-9
 (Some dermocarpoïd Cyanophyceae of the Portuguese coast). Fr
 BAgr. 26 (5) 32901.

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Chiang, Y. M. (1960)

M
8-08143

Taiwania, 7 : 51-75

Marine algae of northern Taiwan (Cyanophyta, Chlorophyta, Phaeophyta)

BAgr. 26 (5) 32907.

Taylor, W. R. (1962)

M
8-08144

Contr. U.S. nat. Herb., 36 (2) : 43-62

Marine algae from the tropical Atlantic Ocean. 5. Algae from the Lesser Antilles

BAgr. 26 (5) 32935.

Takeuchi, Y. (1962)

M
8-08145

Bull. Mar. biol. Sta. Asamushi, 11 (1) : 41-51

Vascular flora of the vicinity of the Asamushi Marine Biological Station, Aomori Prefecture. (1) List of vascular plants collected at Yunoshima

List of 252 spp. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (291).

Kato, M. et al. (1962)

M
8-08146

Bull. Mar. biol. Sta. Asamushi, 11 (1) : 31-6

Interspecific relation in the colony formation among some hydrozoan species

Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (289).

Fukushi, T. (1962)

M
8-08147

Bull. Mar. biol. Sta. Asamushi, 11 (1) : 21-30

The fates of isolated blastoderm cells of sea urchin blastulae and gastrulae inserted into the blastocoel

Developmental potencies of blastoderm cells, such as primary mesenchyme, endodermal, ectodermal, in the blastocoel of animal half larvae. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (288).

Yamamoto, G. & T. Habe (1962)

M
8-08148

Bull. Mar. biol. Sta. Asamushi, 11 (1) : 1-20

Fauna of shell-bearing mollusks in Mutsy Bay; Scaphopoda and Gastropoda (1)

Synonymy, locality, distribution and habitat for 44 spp. with some morphological notes and ill. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (287).

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- Kurogi, M.** (1961) M
8-08149
Bull. Tohoku Fish. Res. Lab., 18 : 1-115
 (Species of cultivation porphyras and their life histories.—Study of the life history of *Porphyras* 2.—). *Ni En*

Diagnosis, morphology, ecology and culture of 4 spp. with comparative notes and key.

- Kikuchi, S.** (1961) M
8-08150
Bull. Tohoku Fish. Res. Lab., 19 : 154-63
 (Influences of water-temperature and salinity on the development of oyster in Matsushima Bay). *Ni En*

Regression of development rate on temperature and salinity is used to 'age' larvae and hence estimate spawning date.

- Kikuchi, S. & S. Tanita** (1961) M
8-08151
Bull. Tohoku Fish. Res. Lab., 19 : 149-53
 (On the relation between the lapse days of collectors and the adhesive-rate of oyster-spats). *Ni En*

Examination of effect of marine-fouling on spat fall.

- Tanita, S. & S. Kikuchi** (1961) M
8-08152
Bull. Tohoku Fish. Res. Lab., 19 : 142-8
 (Studies on the organisms attaching to raft-cultured oysters. 3. Effects on the growth and fattening of oysters). *Ni En*

- Kanno, H. & S. Tanita** (1961) M
8-08153
Bull. Tohoku Fish. Res. Lab., 19 : 135-41
 (Studies on *Chlamys farreri nipponensis* Kuroda. 2. Seasonal change of the gonads). *Ni En*

Ill. histological observations.

- Marumo, R.** (1961) M
8-08154
Inform. Bull. Planktol. Japan, 7 : 1-7
 (Research on deep-sea animals by the 'Ryofu Maru'). *Ni En*

Description of gear; rectangular dredge, Niino dredge, beam trawl, triangular mid-water plankton net, and a 130 cm conical plankton net.

- Marumo, R.** (1962) M
8-08155
Inform. Bull. Planktol. Japan, 8 : 14-22
 (Research on deep-sea animals by the 'Ryofu Maru'). *Ni En*

Collections by 130 cm conical plankton net, beam trawl, rectangular dredge and bacteriological water samplers, in area adjacent to Japan Trench.

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- M
8-08156
- Miyake, S.** (1961)
J. Fac. Agric. Kyushu, 11 (3) : 237-47
 Three new species of the anomura from Japan (Crustacea, Decapoda)
- Ill. description of *Uroptychus kudayagi*, *Porcellana habei*, and *Paguristes japonicus*, all new species. Issued also as: *Contr. Dep. Fish. Kyushu Univ.*, (303).
- M
8-08157
- Tsujii, T.** (1960)
J. Fac. Fish. Univ. Mie, 5 (1) : 1-70
 Studies on the mechanism of shell and pearl formation in Mollusca
- Morphology of mantle and pearl-sac, cytology of mantle cells during shell regeneration; histochemistry of calcium and carbonic anhydrase, of polysaccharides amino acids, proteins and nucleic acids in pearl sac, and of the activity of alkaline phosphatase.
- M
8-08158
- Tanaka, O.** (1961)
J. Fac. Agric. Kyushu, 11 (3) : 249-73
 On copepods associated with marine pelecypods in Kyushu
- Description of *Mycicola ostreae* (Hoshina & Sugiura), *Ostrincola koe*, *Ostrincola japonica*, *Conchyliurus quintus*, *Lichomolgus inflatus*, *Modiolicola bifida*, and *Anthessius pectinis*, of which all save the first are new species.
- M
8-08159
- Suyehiro, Y. et al.** (1962)
Oceanogr. Mag., 13 (2) : 149-53
 6. A brief note on the benthic animals on the fourth cruise of the Japanese Expedition of Deep Seas (JEDS-4)
- Table of numbers of benthic animals collected. Issued also as: *Contr. Jap. Exp. deep Sea*, (34). Ci 8-08111.
- M
8-08160
- Koval'skii, V. V. & L. T. Rezaeva** (1963)
Dokl. Akad. Nauk SSSR, 148 (1) : 238-40
 Soderzhanie vanadiia v krovi *Ascidella aspersa* (Contents of vanadium in the blood of *Ascidella aspersa*)
- M
8-08161
- Okutani, T.** (1962)
Bull. Tokai Fish. Res. Lab., 32 : 1-40
 Report on the archibenthal and abyssal lamellibranchiate Mollusca mainly collected from Sagami Bay and adjacent waters by the R.V. 'Soyo-Maru' during the years 1955-1960. Ni
- Ill. list of 65 spp. (of which 21 are described as new spp. and 2 as new subsp.) with notes on locality and distribution, morphological notes of new spp., and keys for Japanese *Thestyloda* and for *Calypptogena*.

- M
8-08162
- Okutani, T.** (1962)
Bull. Tokai Fish. Res. Lab., 32 : 41-7
 Diet of the common squid, *Ommastrephes sloani pacificus* landed around Ito Port, Shizuoka Prefecture. Ni

Volume and composition of stomach content.

- M
8-08163
- Jouin, C.** (1962)
C.R. Acad. Sci., Paris, 255 (22) : 3065-7
 Le développement larvaire de *Protodrilus chaetifer* Remane (Archianéélides)
 (The larval development of *Protodrilus chaetifer* Remane (Archianellidae))

Observations on larval material collected at Roscoff.

- M
8-08164
- Demeusy, N.** (1962)
C.R. Acad. Sci., Paris, 255 (22) : 3062-4

Observations sur la maturation ovarienne du crabe *Carcinus maenas* L. après ablation des glandes de mue chez les femelles adultes. Premiers résultats (Observations on the maturing of eggs of the crab *Carcinus maenas* L. after removal of the molting glands in the adult female. Preliminary results)

- M
8-08165
- L.B.** (1962)
Bull. Cent. Étud. Rech. sci., Biarritz, 4 (1) : 95
Sargassum vulgare var. *flavifolium* sur la côte basque (*Sargassum vulgare* var. *flavifolium* on the Basque coast)

Short informative note.

- M
8-08166
- Bertrand, H.** (1962)
Bull. Inst. franç. Afr. noire (A), 24 (4) : 1065-114

Contribution à l'étude des premiers états des coléoptères aquatiques de la région éthiopienne (4^e note). Famille: Hydrophilidae s. lat. (*Palpicornia* auct.) (Contribution to the study of the first stages of aquatic coleopters of the Ethiopian region (4th note). Family: Hydrophilidae s. lat. (*Palpicornia* auct.))

Ci 8-08234.

- M
8-08167
- Anon.** (1962)
France Pêche, 7 (68) : 85
 Fiche technique de la pieuvre ou poulpe et des céphalopodes (Fishery card on the *Octopus vulgaris* and Cephalopoda)

Detachable cards, ill., giving biology, habitat, fishing, catch, commercial use of *Octopus vulgaris* and Cephalopoda.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Anon. (1962)

M
8-08168

France Pêche, 7 (67) : 45-6

Fiche technique des moules et mytiliculture (Fishery card on mussels and mytiliculture)

Detachable cards, ill., giving biology, habitat, fishing, catch, commercial use of mussels and mytiliculture.

Lancelot, A. (1961)

M
8-08169

Bull. Cent. Étud. Rech. sci., Biarritz, 3 (4) : 505-12

Les algues mélobésiées de Biarritz (The melobesian algae of Biarritz)

Records the presence of spp. of *Lithophyllum*, *Dermatolithum*, *Mesophyllum*, *Lithothamnium*, *Melobesia* and *Epilithum*.

Ardre, F. (1961)

M
8-08170

Bull. Cent. Étud. Rech. sci., Biarritz, 3 (4) : 489-94

Remarques sur les *Codium* de la Côte Basque (Comments on the *Codium* of the Basque Coast)

Comparative study of specimens collected in the area. Describes *Codium tomentosum* Stackhouse var. *mucronatum* (Hamel).

Cribb, A. B. (1961)

M
8-08171

Pap. Dep. Bot. Univ. Qd., 4 (5) : 51-9

Some marine algae from Thursday Island and surrounding areas

BAgr. 26 (10) 77004.

Fitzpatrick, J. F., Jr. (1963)

M
8-08172

Tulane Stud. Zool., 10 (1) : 57-79

Geographic variation in the crawfish *Faxonella clypeata* (Hay) with the definition and defense of the genus *Faxonella* Creaser (Decapoda, Astacidae)

Investigation of geographic variation and study of related species. The two species currently assigned to subgenus *Faxonella* of a genus *Orconectes* constitute a distinct group worthy of generic distinction. Writer proposed that subgenus be elevated to full generic status. New genus was defined and defended. Range limits of the species discussed.

Maeshige, S. (1962)

M
8-08173

Bull. Jap. Soc. sci. Fish., 28 (6) : 606-9

Chemical studies on the green alga, *Monostroma nitidum* Wittrock. 2. Lowmolecular carbohydrates in the alga

Methods of extraction of sugars and clarification of the extract; identification of sugars by paper chromatography and determination of sugar content. Co 8-09124.

- Kane, J. E.** (1962) M
8-08174
N.Z. J. Geol. Geophys., 5 (3) : 295-315
 Amphipoda from waters south of New Zealand

Identification of 23 spp. from 10 families of Hyperiidea and 1 of Gammaridea, and plots of their distribution; 1 sp. a new record for these waters. Zoo-geographic aspects are discussed.

- Yatsukuka, K.** (1962) M
8-08175
Rep. Usa Mar. biol. Sta., 9 (1) : 1-88
 (Studies on the artificial rearing of the larval Brachyura, especially of the larval blue-crab, *Neptunus pelagicus* Linnaeus). *Ni En*

Determination of spawning and hatching seasons and description of development and growth of zoea larvae, including relation of development with temperature, salinity and oxygen. Photo-taxis of these larvae, their diet and feeding habits. Moulting.

- Utinomi, H.** (1962) M
8-08176
Publ. Seto Mar. biol. Lab., 10 (1) : 105-8
 Preliminary list of octocorals of Sagami Bay deposited in the biological laboratory of the Imperial Household

List of 63 spp. Issued also as: *Contr. Seto Mar. biol. Lab.*, (382).

- Rajabai, K. G.** (1961) M
8-08177
J. zool. Soc. India, 13 (2) : 154-65

Studies on the larval development of Brachyura. 7. Early development of *Metopograpsus messor* (Forskal), *Plagusia depressa squamosa* (Herbst), *Metasesarma rousseauxii* A. M. Edwards and *Sesarma tetragonum* (Fabricius) of the family Grapsidae

Ill. description of zoeal stages. CR 60-2472.

- Sankolli, K. N.** (1961) M
8-08178
J. zool. Soc. India, 13 (2) : 136-42
 On a new species of hermit crab *Pagurus kulkarnii* sp. nov. (Anomura: Paguridae)

Ill. morphological description.

- Tokioka, T.** (1962) M
8-08179
Publ. Seto Mar. biol. Lab., 10 (1) : 1-20
 Contributions to Japanese ascidian fauna. 18. Ascidians from Sado Island and some records from Sagami Bay

Ill. description of 21 spp. of which one is new. Issued also as: *Contr. Seto Mar. biol. Lab.*, (379). Co 61-01617.

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Utinomi, H. (1962)

M
8-08180

Publ. Seto Mar. biol. Lab., 10 (1) : 91-104

Pycnogonida of Sagami Bay—supplement

Ill. list of 16 spp. assigned to 9 genera; morphological notes of some of these, and detailed description of the one that is new. Issued also as: *Contr. Seto Mar. biol. Lab.*, (381).

Sakai, K. (1962)

M
8-08181

Publ. Seto Mar. biol. Lab., 10 (1) : 28-34

Systematic studies on Thalassinidea. 1. *Laomedea astacina* de Haan

Ill. description. Issued also as: *Contr. zool. Lab. Kyushu Fac. Agric.*, (304).

Tokioka, T. (1962)

M
8-08182

Publ. Seto Mar. biol. Lab., 10 (1) : 21-5

Record of a giant egg mass of *Melo ducale* (Lamarck) from the Arafura Sea

Ill. description. Issued also as: *Contr. Seto Mar. biol. Lab.*, (380).

Uchio, T. (1962)

M
8-08183

Publ. Seto Mar. biol. Lab., 10 (1) : 133-44

Recent Foraminifera thanatocoenoses of beach and nearshore sediments along the coast of Wakayama-ken, Japan

Table of occurrences of benthonic Foraminifera as percentage of total (living plus dead) population.

Harada, E. (1962)

M
8-08184

Publ. Seto Mar. biol. Lab., 10 (1) : 109-32

On the genus *Scyllarus* (Crustacea Decapoda: Reptantia) from Japan

Ill. description of 4 spp. occurring in Japanese waters, of which 2 are new, and notes on 3 others, also occurring in Japanese waters; key to these spp. Issued also as: *Contr. Seto Mar. biol. Lab.*, (383).

Yoo, S. K. (1962)

M
8-08185

Bull. Fish. Coll. Pusan Univ., 4 (1/2) : 11-9

(Studies on the food of bivalves in Yong-Ho Inlet of Soo-Young Bay).
Ni En

Notes on spp. of plankton found in stomach of Mollusca and the relation between composition of net-collected plankton and that found in the stomachs.

Kurata, H. (1962)

M
8-08186

Bull. Hokkaido Fish. Res. Lab., 24 : 1-115

Studies on the age and growth of Crustacea

Data are drawn from original experiments and from literature. Increase in linear dimension and weight for many spp.; derivation of a growth equation. Frequency of moulting, effects of environment on growth, and estimation of age and growth of *Porcellio scabar* as example.

- Takeuchi, I.** (1962) M
8-08187
Bull. Hokkaido Fish. Res. Lab., 24 : 163-70
 (On the distribution of zoea larvae of king crab, *Paralithodes camtschatica*, in the southeastern Bering Sea in 1960). *Ni En*
- Variation between night and day hauls.
- Serene, R.** (1962) M
8-08188
Pacif. Sci., 16 (1) : 30-41
 Species of *Cryptochirus* of Edmondson 1933 (Haplocarcinidae)
- Review of the status of *Cryptochirus rugosus*, *C. minutus*, *C. pyriformis* and *C. pacificus*, described by Edmondson in 1933, with reference to the separation between the genus *Cryptochirus* and the genus *Troglocarcinus* proposed by Fize and Serene (1957).
- Gilbert, W. J.** (1962) M
8-08189
Pacif. Sci., 16 (1) : 135-44
 Contribution to the marine Chlorophyta of Hawaii, 1.
- Annotated list of 14 spp.
- Kazihara, T.** (1962) M
8-08190
Bull. Fac. Fish. Nagasaki, 12 : 33-40
 (On the growth of *Styela plicata* Lesueur). *Ni En*
- Length/weight and length/breadth relations, growth rates for these dimensions and their seasonal variation, survival and population growth in weight.
- Toyosima, T. & H. Irie** (1962) M
8-08191
Bull. Fac. Fish. Nagasaki, 12 : 12-9
 (Studies on attaching of barnacles in shallow waters). *Ni En*
- Observations in Nagasaki Bay, 1960, of time of attachment, temperature and depth at which attachment takes place, substrate material and colour.
- Kazikara, T.** (1962) M
8-08192
Bull. Fac. Fish. Nagasaki, 12 : 41-4
 (Seasonal settlements of *Styela plicata* Lesueur). *Ni En*
- Spawning period, establishment of summer and autumn generations, growth rates of these generations, depth of good attachment and growth.
- Yasuda, M., T. Ueda & Y. Yamazoe** (1962) M
8-08193
Bull. Fac. Fish. Nagasaki, 12 : 27-32
 Studies on the quality of asakusanori (*Porphyra tenera*) 3. Fluorometric analysis of phykoerythrin by fluorospectro-photometer). *Ni*

Co 61-08298.

Tsuruga, H. et al. (1962)

M
8-08194

Bull. Naikai Fish. Res. Lab., 18 : 11-3

(Biochemical investigations of the marine algae. 4. On the environmental conditions and chemical constituents of the laver (*Porphyra tenera*)). Ni En

Issued also as: *Contr. Naikai Fish. Res. Lab.*, (100). Ci 61-01466, Ci 61-01465.

Hayashi, T. & Y. Yamaguchi (1962)

M
8-08195

Bull. Naikai Fish. Res. Lab., 15 : 1-113

(Study on food niches of the benthic piscivores). Ni En

Study of benthic communities of the Japanese Inland Sea and adjacent continental shelf of the Pacific coast. Methods of collection and handling materials. Size relations between predator and prey.

Arai, K., T. Furukawa & T. Saito (1961)

M
8-08196

Bull. Fac. Fish. Hokkaido, 12 (1) : 66-70

(Acid-soluble nucleotides in muscle of marine invertebrates. 3. Acid-soluble nucleotides in foot and adductor muscles of seashells). Ni En

Changes in these compounds in cold-stored material. Co 61-09282.

Fukushima, H. (1961)

M
8-08197

Bull. Mar. biol. Sta. Asamushi, 10 (4) : 237-40

The brief notes on the diatoms vegetation at the Prince Olav coast, Antarctica

Taxonomic outline of the flora.

Fukushima, K. (1962)

M
8-08198

Bull. Jap. Soc. sci. Fish., 28 (9) : 909-13

(Polarographic studies on the molluscan meat. 8. Studies on the distribution of homarine (N-methyl picolinic acid betaine) in some molluscan and crustacean tissues). Ni En

Co 8-11186.

Raikov, I. B. (1962)

MF
8-08199

Cah. Biol. mar., 3 : 325-61

Les Ciliés mésopsammiques du littoral de la Mer Blanche (U.R.S.S.) avec une description de quelques espèces nouvelles ou peu connues (The mesopsammon Ciliata from the littoral of the White Sea (USSR) with a description of some new or little known species). En Ru

59 spp. and 2 varieties of ciliates were registered. Descriptions of all the new forms (*Tracheloraphis kahli* s. sp., *Tr. discolor* n. sp., *Tr. vermiformis* n. sp., *Tr. drachi* f. *bimicronucleata* forma nov., *Tr. striatus* n. sp., *Trachelonema oligostriata* n. sp., *Tr. lanceolata* n. sp., *Kentrophoros latum* n. sp., *K. uninucleatum* n. sp. and *Geleia murmanica* n. sp.) as well as of *Tracheloraphis phoenicopterus* (Cohn), *Tr. margaritatus* (Kahl) and *Tr. dogieli* (Raikov) are given. Ecological analysis of the fauna.

Chapman, V. J. (1959)

Proc. Int. bot. Congr., 9 (1) : 180-3

Factors controlling algal zonation

BAgr. 26 (7) 50577.

MF
8-08200

Lejuez, R. (1962)

C.R. Acad. Sci., Paris, 255 (22) : 3034-6

Définition de deux sous-espèces chez l'isopode flabellifère *Sphaeroma hookeri* Leach (Definition of two sub-species in the flabellifer isopod *Sphaeroma hookeri* Leach)

MF
8-08201

Describes *S. hookeri hookeri* and *S. hookeri mediterranea* from the brackish water lagoons of Rousillon (French Mediterranean coast).

Fischer-Piette, E. & J. Seoane-Camba (1962)

Bull. Inst. océanogr. Monaco, (1244) : 36 p.

Ecologie de la ria-type: la Ria del Barquero (Ecology of the "ria-type": the Ria del Barquero). Es En

MF
8-08202

Supplies some information on environmental factors and describes the sessile bios from the coast to the open sea, endeavouring particularly to determine the order of apparition of the species.

Anon. (1962)

New Scient., 16 (315) : 505

Canada. Attack on algae

MF
8-08203

Short note on a new herbicide called Aqualine developed by the Water Resources Commission of Ontario, in conjunction with the Shell Oil Company of Canada. It can be "seeded" in the form of pellets from aircraft. Successful application depends on the water being in a state of tranquility.

Poisson, R. A. (1960)

Bull. Inst. franç. Afr. noire, 22 (3) : 984-1007

Mission de M. H. Bertrand (1956-57) en Afrique occidentale et en Afrique équatoriale. Hydrocorises (Mission of M. H. Bertrand (1956-57) in western and equatorial Africa. Hidrocharises)

MF
8-08204

André, F. (1961)

Bull. Cent. Étud. Rech. sci., Biarritz, 3 (4) : 495-504

Algues marines rares ou nouvelles pour la Côte Basque française (Marine algae rare or new to the French Basque Coast)

MF
8-08205

Lists some spp. of Cyanophyceae, Chlorophyceae, Xanthophyceae, Phaeophyceae, Rhodophyceae with systematic and ecological remarks.

- Fay, P. & G. E. Fogg** (1962) MF
8-08206
Arch. Mikrobiol., 42 (3) : 310-21
Studies on nitrogen fixation by blue-green algae. 3. Growth and nitrogen fixation in *Chlorogloea fritschii* Mitra
BAgr. 26 (10) 77526.
- McMullan, J. L.** (1962) MF
8-08207
J. Dep. Agric. W. Aust., (Ser. 4), 3 (4) : 252-5
Stilling coastal sand drifts with marram grass (*Ammophila arenaria*)
BAgr. 26 (10) 78943.
- Fairbanks, L. D.** (1963) MF
8-08208
Tulane Stud. Zool., 10 (1) : 3-47
Biodemographic studies of the clam *Rangia cuneata* Gray
Pelecypod mollusk commonly inhabiting brackish water coastal areas of northern Gulf of Mexico, is known from Neocene fossiliferous deposits of the Mississippi embayment. Investigation to determine pertinent physical and biological factors habitat concerning population density, sizes of individuals, and reproductive cycle. Two areas, ten miles apart in lake Pontchartrain, Louisiana, were selected for investigation from Feb. 1957 to Sep. 1958. Temperature, salinity, total phosphorus, phytoplankton pigment concentration, and oxidizable organic matter in solution were estimated. Population densities by size classes of adults were estimated for the two areas.
- Enomoto, Y.** (1961) MF
8-08209
Bull. Jap. Soc. sci. Fish., 27 (12) : 1047-51
On the bacteria-free culture of *Melosira nummuloidea* (Dillw.) C. A. Agardh
Culture medium and methods, and use of antibiotics.
- Anon.** (1959) F
8-08210
J. agric. Fd Chem., 7 : 600-4
Food space age problem
Briefly describes closed ecological system as balance between man and a photosynthetic plant where the plant should provide: gas exchange between itself and the spaceman; means of consuming human wastes; and food.
- Balesdent-Marquet, M.-L.** (1963) F
8-08211
C.R. Acad. Sci., Paris, 256 (1) : 262-4
Répartition des cellules de Zenker et détermination spécifique de *Asellus* (*Asellus*) *aquaticus* Linné sensu Racovitza et *Asellus* (*Proasellus*) *meridianus* Racovitza (Distribution of the Zenker's cells and specific determination of *Asellus* (*Asellus*) *aquaticus* Linné sensu Racovitza and *Asellus* (*Proasellus*) *meridianus* Racovitza)
Preliminary note based on material collected in Lorraine (France).

- F
8-08212
- Asaul, Z. I.** (1961)
Ukr. bot. Zh., 18 (6) : 56-63
(Study of seasonal dynamics of development of Euglenidae algae in ponds of the west Ukrainian Polesye). *Uk En*
BAgr. 26 (8) 59227.
- F
8-08213
- Auyang, T. S. C.** (1962)
Rhodora, 64 (757) : 49-59
A survey of the algae of lake Quinsigamond
BAgr. 26 (7) 50108.
- F
8-08214
- Bell, T. N.** (1961)
Proc. S. Dak. Acad. Sci., 40 : 125-31
Algal flora of the Gavins Point Reservoir
BAgr. 26 (7) 50109.
- F
8-08215
- Bourrelly, P.** (1961)
Bull. Micros. Appl., (2) 11 (5) : 1s-26s
(Practical introduction of the systematics of the sweet water algae. 8. Chlorococcales). *Fr*
BAgr. 26 (7) 50110.
- F
8-08216
- Gashwiler, K. & J. D. Dodd** (1961)
Proc. Iowa Acad. Sci., 68 : 129-31
Algae from the warm pools of Silver Lake fen
BAgr. 26 (7) 50112.
- F
8-08217
- Bourrelly, P.** (1959)
Proc. Int. bot. Congr., 9 (1) : 198-201
(The big ecological problem in the algology of fresh water). *Fr*
BAgr. 26 (7) 50574.
- F
8-08218
- Prescott, G. W.** (1959)
Proc. Int. bot. Congr., 9 (1) : 201-7
Ecology of freshwater algae in the Arctic
BAgr. 26 (7) 50622.
- F
8-08219
- Bourrelly, P.** (1961)
Bull. Res. Coun. Israel (B), 10 (D) (1/4) : 9-14
(Some algae from fresh water in the environs of Konakry). *Fr*
BAgr. 26 (5) 32905.

Bourelly, P. (1961)

Rev. algol., 6 (1) : 57-68

(Some rare or new algae from lake of Grand-Lieu). *Fr*

BAgr. 26 (5) 32906.

F

8-08220

Ganguly, D. N. & B. Mitra (1961)

Indian Agric., 5 (2) : 184-8

Observation on the fish-fry destroying capacity of certain aquatic insects and the suggestion for their eradication

F

8-08221

TA k474. Field observations and laboratory experiments on larvae of Dytiscidae (*Dytiscus* and *Cybister*) and adults of Nepidae (*Nepa* and *Ranatra*) were carried out in Calcutta. Presence of large populations of insects in nursery tanks must be detrimental. Limited populations are not very harmful and may act as natural means to prevent congestion. Chemical control is not practicable; mechanical eradication with small-mesh nets is suggested.

Nose, T. (1961)

Bull. Freshw. Fish. Res. Lab., Tokyo, 11 (2) : 11-8

(On the emerging behaviour *Chironomus plumosus* larvae). *Ni En*

F

8-08222

Description of apparatus and method for counting larvae; observations on emergence, growth, swimming activity.

Lak, G. Ts. (1963)

Dokl. Akad. Nauk SSSR, 148 (1) : 170-1

Diatomovye vodorosli ozernykh otlozhenii Karelii (Diatom algae in lacustrine deposits of Karelia)

F

8-08223

Zahnd, J. P. & A. Porte (1962)

C.R. Acad. Sci., Paris, 255 (22) : 3037-8

Sur un aspect particulier du réticulum cytoplasmique et ses rapports avec le chondriome dans les très jeunes oöcytes d'un Poecilidé: *Mollienesia sphenops* (On a special aspect of the cytoplasmic reticulum and its relation to the chondriosoma in the young oocytes of a Poeciliidae: *Mollienesia sphenops*)

F

8-08224

Oltean, M. & V. Zanoschi (1962)

Stud. Cercet. Biol. (veg.), 14 (4) : 423-8

Observatii asupra diatomeelor din mlastinile eutrofe din bazinul Bilborului (Some observations on the diatoms from the eutrophic marshes of the Bilbor basin). *Ro Ru Fr*

F

8-08225

Records 108 taxons, including 8 n. spp.

Reid, G. W. & J. R. Assenzo (1961)*

Wat. & Sewage Wks, 108 (6) : 248-50

Culture and harvest of attached algae grown on domestic sewage—part 1

F

8-08226

- Anon.** (1962) F
8-08227
Eau, Paris, 49 (5) : 141
 Revue des livres. Bestrijding der overtollige Water-planten (Book reviews. Control of invading aquatic weeds). *Ne*

Re 61-13551.

- Motaş, C. & F. Botea** (1962) F
8-08228
Stud. Cercet. Biol. (anim.), 14 (4) : 529-37
 Cercetări asupra faunei freatice din valea Prahovei (Research on the interstitial fauna of the Prahova valley). *Ro Ru Fr*

List of Oligochaeta, Copepoda, Bathynellacea, Cladocera, Amphipoda, Hydrachnellae, Ephemera and Diptera collected in 1960-61 and ecological remarks.

- Botea, F.** (1962) F
8-08229
Stud. Cercet. Biol. (anim.), 14 (4) : 539-43
 Oligochete limicole din freaticul văii Prahovei (Fresh water Oligochaeta from the interstitial fauna of the Prahova valley). *Ro Ru Fr*

Records 14 species of the families Naididae, Pristinidae, Enchytraeidae, Tubificidae, Lumbriculidae, Haplotaxidae and Lumbricidae collected in 1960-61.

- Botea, F.** (1962) F
8-08230
Stud. Cercet. Biol. (anim.), 14 (4) : 545-8
 Oligochete limicole din freaticul văilor Iadului şi Drăganului (Fresh water Oligochaeta from the interstitial fauna of the Iad and Drăgan valleys). *Ro Ru Fr*

Record of species of the families Naididae, Enchytraeidae, Tubificidae and Lumbriculidae collected in 1961.

- Botea, F.** (1962) F
8-08231
Stud. Cercet. Biol. (anim.), 14 (3) : 401-9
 Contribuţii la studiul răspîndirii oligochetelor limicole din R.P.R. (valea Motrului) (4) (Contribution to the study of the distribution of fresh water Oligochaeta in the Roumanian People's Republic (valley of the river Motru) (4)). *Ro Ru Fr*

Systematic study of 19 spp. of the families Aeolosomatidae, Naididae, Pristinidae, Enchytraeidae and Lumbriculidae, including some new species.

- Grenier, P. & J. Hamon** (1962) F
8-08232
Bull. Inst. franç. Afr. noire, 24 (1) : 316-8

Récoltes de larves et de nymphes de diptères aquatiques (Nématocères piqueurs) (Mission Bertrand, 1956-1957) (Record of larvae and nymphs of aquatic Diptera (stinging Nematocera) (Bertrand Mission, 1956-1957))

New record of Simuliidae and Culicidae for western Central Africa.

Hamon, J., B. Dedewanou & M. Eyraud (1962)

F
8-08233

Bull. Inst. franç. Afr. noire, 24 (3) : 854-79

Études entomologiques sur la transmission du paludisme humain dans une zone forestière africaine, la région de Man, République de Côte d'Ivoire (Entomological study on the transmission of human malaria in an African forest zone, Man region, Ivory Coast Republic). En

Study of seasonal variations in anopheline mosquitoes and their relations with malaria transmission. Establishes what species occur, and for the most important ones—particularly *A. gambiae* and *A. funestus*—studies the house-resting and man-biting densities, the physiological age, the biting-cycle, the sporozoite rate, the trophic preferences and the susceptibility to insecticides.

Bertrand, H. (1962)

F
8-08234

Bull. Inst. franç. Afr. noire, 24 (3) : 710-77

Contribution à l'étude des premiers états des coléoptères aquatiques de la région éthiopienne (2^e note). Famille: Dryopidae (Contribution to the study of the first stages of the aquatic Coleoptera of the Ethiopian region (2nd note). Family: Dryopidae)

Describes the larvae and nymphs, makes taxonomic comments. Ci 8-08166.

Nielsen, E. S., V. K. Hansen & E. G. Jørgensen (1962)

F
8-08235

Physiol. Plant., 15 (3) : 505-17

The adaption to different light intensities in *Chlorella vulgaris* and the time dependence on transfer to a new light intensity

Curves showing the rate of photosynthesis as a function of light intensity are presented and growth rates at the two light intensities are computed by means of the measured rates of photosynthesis and respiration. They are identical with the growth rates measured by means of the increase in number of cells. The importance is stressed of using dilute concentrations of algae in experiments of both growth and photosynthesis so that no self-shading takes place.

Bertrand, H. (1962)

F
8-08236

Bull. Inst. franç. Afr. noire, 24 (3) : 880-5

Mission H. Bertrand (1956-1957) en Afrique occidentale et équatoriale. Hydrocorises (Mission of H. Bertrand (1956-1957) in western and equatorial Africa. Hydrocharises

Ci 8-08204. Complementary list to species discussed in 8-08204.

Angelier, E. (1961)

F
8-08237

Bull. Soc. Hist. nat. Toulouse, 96 (1/2) : 7-14

(The lakes of Estibère: notes on the population of the mountain lakes). *Fr*

BAgr. 26 (10) 76817.

- F
8-08238
- Bertrand, H.** (1961)
Bull. Soc. ent. Fr., 66 (9/10) : 217-9
(Capture of an aquatic larva of Curculionidae in eastern Africa (Uganda) (Col.)). *Fr*

BAgr. 26 (10) 82217.

- F
8-08239
- Berthelemy, C. & F. Clavel** (1961)
Bull. Soc. Hist. nat. Toulouse, 96 (3/4) : 241-9
(Distribution of Coleoptera in a water course of the western edge of the French Massif Central). *Fr*

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8-08430*Bull. Inst. franç. Afr. noire*, 24 (3) : 909-11

Evidence of over-fishing in the Sierra Leone trawl fishery

Short note giving evidence based on catch decrease by unit of effort and on size composition changes, in the coastal strip. Suggests some management measures.

Vastesaeger, M., P. Gillot & E. Vastesaeger (1961)M
8-08431*Bull. Cent. Étud. Rech. sci., Biarritz*, 3 (4) : 449-55

L'athérosclérose spontanée du thon rouge (*Thynnus thynnus* L.) (Spontaneous atherosclerosis of bluefin tuna (*Thynnus thynnus* L.))

Serial sections made in the coronary arteries of immature bluefin tunas (*Thynnus thynnus* L.) showed widespread intimal sclerosis in all the specimens examined. These observations prove that spontaneous atherogenesis can occur in animals having a high unsaturated and polyethenoid fatty acids diet.

AQUATIC STOCKS

- M
8-08432
- Hatanaka, M. & K. Sekino** (1962)
Bull. Jap. Soc. sci. Fish., 28 (9) : 857-61
 (Ecological studies on the Japanese sea-bass *Lateolabrax japonicus*. 2. Growth). Ni En

Co 8-08433. Determination of growth by scale-reading evidence of the degree to which growth potential is realized.

- M
8-08433
- Hatanaka, M. & K. Sekino** (1962)
Bull. Jap. Soc. sci. Fish., 28 (9) : 851-6
 (Ecological studies on the Japanese sea-bass *Lateolabrax japonicus*. 1. Feeding habitat). Ni En

Change of diet with change of habitat; experimental evidence on amount of feeding and field evidence of competition for preferred food.

- M
8-08434
- Hatanaka, M. & K. Iizuka** (1962)
Bull. Jap. Soc. sci., Fish., 28 (2) : 155-61
 (Studies on the fish community in the *Zostera* area. 2. Trophic order in a fish group living outside of the *Zostera* area). Ni En

Stomach contents of 8 spp. of fish. Co 8-08493.

- M
8-08435
- Mio, S.** (1962)
Sci. Bull. Fac. Agric. Kyushu, 19 (4) : 507-20
 (Studies on population biology of coastal fishes in Kyushu. 4. Age determination and growth of *Chrysophrys major* Temminck et Schlegel). Ni En

Age-determination by scale reading; identification of best body-area from which to take scales; length to scale-size relation; period of mark formation; von Bertalanffy equation for growth in length and weight; weight/length relation.

- M
8-08436
- Tatsuki, K. et al.** (1962)
Rep. Nankai Fish. Res. Lab., 15 : 85-9
 (Ecological study of tunas in the Kinan area. 3. Fluctuations of hooked rate and size composition of albacore). Ni En

Co 61-10147.

- M
8-08437
- Tatsuki, K. et al.** (1962)
Rep. Nankai Fish. Res. Lab., 15 : 91-5
 (Ecological study of tunas in the Kinan area. 4. Fluctuations of hooked rate and size composition of yellowfin). Ni En

Co 8-08436.

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- Fujii, Y., K. Mimoto & S. Higasa** (1962) M
8-08438
Rep. Nankai Fish. Res. Lab., 15 : 127-35

(Biochemical studies on the races of tuna. 6. Several investigations on the treatment of samples in determination of the base composition of testis DNA (Pt. 2)). *Ni En*

Co 61-10143.

- Fujii, Y. & S. Higasa** (1962) M
8-08439
Rep. Nankai Fish. Res. Lab., 15 : 147-54

(Biochemical studies on the races of tuna. 8. DNA content in erythrocytes of tunas (Pt. 1)). *Ni En*

Description of method. Co 8-08440.

- Fujii, Y., K. Mimoto & S. Higasa** (1962) M
8-08440
Rep. Nankai Fish. Res. Lab., 15 : 137-45

(Biochemical studies on the races of tuna. 7. The base composition of DNA of tuna (Pt. 2)). *Ni En*

Intra-specific variations in base composition. Co 8-08438

- Koto, T. & K. Kodama** (1962) M
8-08441
Rep. Nankai Fish. Res. Lab., 15 : 97-107

(Some considerations on the growth of marlins, using size-frequencies in commercial catches. 1. Attempts to estimate the growth of sailfish). *Ni En*

Use of two methods: (1) dissection of compound curves and selection of a modal length for each component, (2) assumption of boundaries of age groups in size distributions.

- Koto, T. & K. Kodama** (1962) M
8-08442
Rep. Nankai Fish. Res. Lab., 15 : 109-26

(Some considerations on the growth of marlins, using size frequencies in commercial catches. 2. Attempts to estimate the growth of so-called white marlin, *Martina martina* (J. and H.)). *Ni En*

Use of methods employed in previous paper and examination of annual changes in index of abundance of length classes (the index is hooked-rate weighted by the percentage of each length class). Co 8-08441.

- Suda, A.** (1962) M
8-08443
Rep. Nankai Fish. Res. Lab., 15 : 1-37

(Studies on the population structure and catch variation of the North Pacific albacore). *Ni En*

Racial problems and life history; representation of abundance of fishable stock; size and age composition and relation between abundance and other factors; possibility of forecasting abundance.

AQUATIC STOCKS

- Suda, A.** (1962) M
8-08444
Rep. Nankai Fish. Res. Lab., 15 : 69-77
 Catch variations in the North Pacific albacore. 3. Comparison of abundance between albacore and big-eye in the north west Pacific
 Examination of annual variation of indexes of relative abundance of exploitable fish on the fishing grounds and of the relative abundance of size and age groups. Issued also as: *Contr. Nankai Fish. Res. Lab.*, (166). CR 9-04401.
- Kume, S.** (1962) M
8-08445
Rep. Nankai Fish. Res. Lab., 15 : 79-84
 A note on the artificial fertilization of bigeye tuna, *Parathunnus mebachii* (Kishinouye)
 Ill. description of development of eggs. Issued also as: *Contr. Nankai Fish. Res. Lab.*, (169).
- Morio, T., A. Suzuki & S. Higasa** (1962) M
8-08446
Rep. Nankai Fish. Res. Lab., 15 : 155-9
 (Biochemical studies on the growth and maturation of fish. 14. Preliminary survey on zinc in pyloric coeca). *Ni En*
 Forms of Zn in various tunas. Ci 585890, Ci 60-9149.
- Humes, A. G.** (1961) M
8-08447
Mem. Inst. sci. Madagascar (F), 4 : unpag.
 Copépodes parasites de mollusques à Madagascar (Copepoda parasites of molluscs in Madagascar)
 Re 61-00388.
- Asano, M. & M. Itoh** (1962) M
8-08448
Tohoku J. agric. Res., 13 (2) : 151-67
 Toxicity of a lipoprotein and lipids from the roe of a blenny, *Dinogunellus grigorjewi* Herzenstein
 Extraction of lipoprotein fraction and assay of its toxicity.
- Ishida, R., T. Sasaki & S. Arita** (1962) M
8-08449
Bull. Hokkaido Fish. Res. Lab., 24 : 171-6
 (Histological studies on ovarian eggs of herring, *Clupea pallasii*, with special reference to so-called 'shiniko'—abnormal eggs). *Ni En*
- Konda, M.** (1962) M
8-08450
Bull. Hokkaido Fish. Res. Lab., 24 : 139-47
 (The relation between the size of mesh of salmon gill net and the length of salmon in the catches). *Ni En*
 Relation between fork length and maximum circumference of red, chum, coho and pink salmon and selection range for each species.

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- Sano, O.** (1962) M
8-08451
Bull. Hokkaido Fish. Res. Lab., 24 : 148-62
 (The investigation of salmon shark as a predator on salmon in the North Pacific, 1960). *Ni En*

Distribution, migration, feeding habits and other features of the biology of salmon sharks, and consideration of the place occupied by this sp. in the food-web.

- Koga, S.** (1962) M
8-08452
Bull. Fac. Fish. Nagasaki, 12 : 1-11
 (Studies on the fluctuations in catch of the tuna-fishing fleet. 10. Variability of hooked-rates for tunas and marlins in the western South Pacific Ocean during four months from August to November 1960). *Ni En*

Tabulation of rates and comparisons between seasons and areas. CR 61-08291.

- Mizue, K. & K. Yoshida** (1962) M
8-08453
Bull. Fac. Fish. Nagasaki, 12 : 45-52
 (Studies on the little toothed whales in the west sea area of Kyusyu. 8. About *Grampus griseus* caught in Goto Is., Nagasaki Pref.). *Ni En*

Body and skull measurements, coloration, schooling habit, reproduction. Co 62-03292.

- Kuniyuki, K. & T. Koide** (1962) M
8-08454
Bull. Naikai Fish. Res. Lab., 18 : 1-9
 (The ecological study of the *Hemiramphus sajori* (Temminck et Schlegel)). *Ni En*

Development, growth rate, breeding season, sex-ratio, vertebral number, of a population of this sp. caught along the coast near Onomichi; feeding, length/weight relation and length/scale-diameter relation. Issued also as: *Contr. Naikai Fish. Res. Lab.*, (99).

- Tatara, K., Y. Yamaguchi & T. Hayashi** (1962) M
8-08455
Bull. Naikai Fish. Res. Lab., 16 : 199-228
 (Study for the restoration of length and weight of prey fishes, found in the stomachs of predators, by graphic estimation using column length of fish vertebrae). *Ni En*

Relations between vertebral column length (V.L.), body length (B.L.) or anal length (A.L.), between B.L. (or A.L.) and total length (T.L.) or fork length (F.L.), and between log T.L. (or log A.L.) and log B.W., are examined statistically for 76 of the spp. dealt with in Takahashi (1962), and results are presented in tabular and graphic form.

AQUATIC STOCKS

- Takahashi, Y.** (1962) M
8-08456
Bull. Nakai Fish. Res. Lab., 16 : 1-198
 (Study for the identification of species based on the vertebral column of Teleostei in the inland sea and its adjacent waters). *Ni En*

Study of 256 spp. from 100 families, with description and photographs of vertebral column of each sp. and keys entered by: (1) vertebral characters, (2) vertebral numbers, (3) caudal vertebral number, (4) number of vertebrae in parts of the column.

- Blanc, M.** (1961) M
8-08457
Mem. Inst. sci. Madagascar (F), 4 : 109-59
 Les poissons des terres australes et antarctiques françaises (Fishes from southern and Antarctic French lands)

Ill. list, with morphological notes of fishes taken on Kerguelen Is., Adélie Land, and St. Paul and Amsterdam Islands.

- Dotu, Y.** (1962) M
8-08458
Bull. Jap. Soc. sci. Fish., 28 (5) : 549-50
 (Symposium on the culture of fish in sea-water. 2. Culture of blood fish stock). *Ni*

CR 8-08464.

- Enomoto, Y. & S. Hamada** (1962) M
8-08459
Bull. Jap. Soc. sci. Fish., 28 (3) : 314-21
 Studies on plankton off the west coast of Kyushu. 3. On the foods of the sardine, *Sardinia melanosticta* (Temminck et Schlegel)

Samples of sardine were collected and stomach contents taken, body length and weight and fat content were measured, sex ratio was recorded; their stomach contents of phyto- and zoo-plankton were classified; plankton hauls were made; relations between these were studied.

- Fujii, T.** (1961) M
8-08460
Bull. Fac. Fish. Hokkaido, 12 (2) : 129-37
 (Exploratory fishing of salmon with gill nets of various mesh sizes and with a trammel net in Aleutian waters 1957). *Ni En*

Specifications of gear, species, age and size composition of catch; catching rates.

- Fujiva, M. & U. Kobayashi** (1962) M
8-08461
Bull. Jap. Soc. sci. Fish., 28 (6) : 561-4
 A symptom observed on the eyes of fish bred in aquaria

Histo-pathological examination and diagnosis.

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Fourmanoir, P. (1961)

M
8-08462

Mem. Inst. sci. Madagascar (F), 4 : 1-81

Requins de la côte ouest de Madagascar (Sharks of the west coast of Madagascar)

Ill. morphological account of spp. taken, with notes on localities of occurrence, and tabulations of morphometric data.

Fourmanoir, P. (1961)

M
8-08463

Mem. Inst. sci. Madagascar (F), 4 : 83-107

Liste complémentaire des poissons du canal de Mozambique (Supplementary list of fishes of the Mozambique Channel)

Ill. list with brief notes on form and locality of capture.

Harada, T. (1962)

M
8-08464

Bull. Jap. Soc. sci. Fish., 28 (5) : 552-3

(Symposium on the culture of fish in sea-water. 4. The crux of the problems on the culture of young yellowtail). *Ni*

CR 8-08458.

Anon. (1962)

MG
8-08465

Fish. News., Lond., (2573) : 7

ICES mesh gauge

WFA 14 (1) : 14-1171. Fishing methods and gear—Nets—Mesh measurement.

Mann, H. (1961)

MF
8-08466

Fischwirt, 11 (8) : 233-9

Gewichtsverluste bei Hälterung von Aalen (Loss of weight in eels while kept in holders)

Michailowa, L. (1961)

MF
8-08467

Dtsch. Fish.-Ztg., 8 (6) : 191-2

Die Fischwanderungen (Fish migrations)

Popular review.

Jokiel, J. & T. Backiel (1960)

MF
8-08468

Roczn. Nauk rol. (B), 75 (2) : 213-22

Polowy troci (*Salmo trutta* L.) w Zatoce Gdańskiej i w systemie rzeczonym Wisły (Catches of sea-trout (*Salmo trutta* L.) in the Danzig Bay and in the Vistula River system). *Pl Ru En*

AQUATIC STOCKS

Richardson, T. & A. L. Tappel (1962) MF
J. Cell. Biol., 13 (1) : 43-54 8-08469
 Swelling of fish mitochondria

WFA 14 (1) : 14-1053.

Muić, N. & A. Meniga (1962) MF
Arch. Biochem., 96 : 280-6 8-08470
 The biochemistry of protamine from the milt of *Mugil cephalus*

WFA 14 (1) : 14-1473. Fish-chemical composition—Miscellaneous constituents.

Kurohagi, T. & S. Sasaki (1964) MF
Sci. Rep. Hokkaido Salm. Hatch., (18) : 91-111 8-08471
 (Some ecological studies on the kokanee salmon (*O. nerka* var. *adonis*) in Lake Shikotsu, Hokkaido. 2. Some observations on the growth of scale).
 N; En

Observation of growth patterns and relation of increase of circuli and radius to growth of fish. Co 8-08487.

Leray, C. (1963) MF
C.R. Acad. Sci., Paris, 256 (3) : 795-8 8-08472
 Étude de l'incorporation de cystéine marquée au soufre 35 dans le système hypothalamohypophysaire et plus spécialement dans l'adénohypophyse chez un téléostéen: *Mugil cephalus* L. (Study on the incorporation of cysteine, with sulphur 35, in the hypothalamo-hypophysial system and particularly in the adenohypophysis of a teleostean: *Mugil cephalus* L.)

Preliminary note, reporting results of experiments on fish kept in aquarium.

Smith, M. S. (1962) MF
Conservationist, 16 (6) : 20-1 8-08473
 Ecology on parade. Fish habitat groups artistically displayed by the Rochester Museum

BA 40 (2) 4287.

Fry, D. H. (1961) MF
Bull. Pacif. Mar. Fish. Comm., 5 : 77-83 8-08474
 Some problems in the marking of salmonids

Discussion of evidence on the regeneration of clipped fins and of the mortality among fish marked in this way.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Sano, T. (1962)

MF
8-08475

J. Tokyo Univ. Fish., 48 (1) : 99-104

Haematological studies of the culture fishes in Japan. 5. Application of a protein refractometer on fish serum

Test, by comparison with results from micro-Kjeldahl method, of the Hitachi hand protein refractometer for measurement of relative changes of serum protein. Interspecific differences in the results, and those due to feeding, are considered. Co 61-04722.

Sano, T. (1962)

MF
8-08476

J. Tokyo Univ. Fish., 48 (1) : 105-9

Haematological studies of the culture fishes in Japan. 6. Variation in blood constituents of Japanese eel, *Anguilla japonica*, during starvation

Variation in blood sugar, serum protein, serum NPN, blood urea, blood creatinine and haematocrit, during starvation for 90 days. Co 8-08475.

Breguet, Cl. (1961)

MF
8-08477

Bull. Cent. Étud. Rech. sci., Biarritz, 3 (4) : 437-47

La résistance hydrodynamique du poisson. Discussion des expériences du professeur Magnan (Fish hydrodynamic drag. Discussion of the experiments of professor Magnan)

Reviews experiments in the light of recent progress in hydrodynamics.

Nakano, T. (1962)

MF
8-08478

Bull. Jap. Soc. sci. Fish., 28 (4) : 453-5

(Studies on the physiological chemistry of phosphorus compounds in fish muscle. 10. General properties of myosin ATP-ase isolated from fish muscle). Ni En

Co 8-08538.

Yamaguchi, K. et al. (1962)

MF
8-08479

Bull. Jap. Soc. sci. Fish., 28 (2) : 192-200

(Studies on multiple hemoglobins of eel. 2. Oxygen dissociation curve and relative amounts of components F and S). Ni En

Alkali denaturation curves of hemoglobin and myoglobin were determined mainly in oxy form under various conditions. Co 8-08480.

Yamaguchi, K. et al. (1962)

MF
8-08480

Bull. Jap. Soc. sci. Fish., 28 (2) : 184-91

(Studies on multiple hemoglobins of eel. 1. Absorption spectrum and some other properties). Ni En

The other properties include solubility curves in carbonyl form, alkali denaturation curves in oxy form, heat coagulation curves, electrophoretic patterns and pH-mobility curves.

- Satch, H., N. Nakamura & T. Hibiya** (1962) MF
8-08481
Bull. Jap. Soc. sci. Fish., 28 (6) : 579-84
(Studies on the sexual maturation of the eel. 1. On the sex differentiation and the maturing process of the gonads). Ni En

Histological study of *Anguilla japonica*.

- Hoshina, T.** (1962) MF
8-08482
Bull. Jap. Soc. sci. Fish., 28 (2) : 162-4
On a new bacterium, *Paracolobactrum anguillimortiferum* n. sp.

Morphology, culture characteristics, pathogenicity and habitat of this bacterium responsible for red disease of eels.

- Wohlschlag, D. E.** (1962) MF
8-08483
Science, 137 (3535) : 1050-1
Metabolic requirements for the swimming activity of three antarctic fishes

Ci 581465; 582118; 60-0203; 61-00965; 61-06950. Logarithm of amount of oxygen consumed per unit swimming velocity for steadily swimming fishes of genus *Trematomus* at freezing temperatures is of same order as rate for temperature species at their lower temperature ranges. Comparison with publ. data for *Salvelinus*, *Coregonus*, *Oncorhynchus*, *Lepomis*, *Carassius*, *Trachurus*.

- Sakano, E.** (1961) MF
8-08484
Sci. Rep. Hokkaido Salm. Hatch., 16 : 103-6
Anaesthetizing experiments of chum salmon fry with tricaine methane-sulfonate (M.S. 222)

Experimental results and conclusions.

- Kobayashi, T.** (1961) MF
8-08485
Sci. Rep. Hokkaido Salm. Hatch., 16 : 1-102
(Biology of chum salmon, *Oncorhynchus keta* (Walbaum), by the growth formula of scale). Ni En

Detailed examination of the scale-reading technique applied to this sp., with reference to relations between growth of fish, growth of scale and number of circuli; use of data from scale-reading for examination of differences of growth between fish of different species and years.

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Nagasawa, A. & S. Sano (1961)

MF
8-08486

Sci. Rep. Hokkaido Salm. Hatch., 16 : 107-25

(Some observations on the downstream chum salmon fry (*Oncorhynchus keta*) counted in the natural spawning ground at Memu Stream, 1957-1959).
Ni En

The natural spawning efficiency of chum salmon (*Oncorhynchus keta*) in Memu Stream, a tributary of the Tokachi River in east Hokkaido, was studied by using the count-trap during 1957 to 1959. Total eggs deposited on experimental spawning ground estimated from count of females and average fecundity.

Kurohagi, T. & S. Sasaki (1961)

MF
8-08487

Sci. Rep. Hokkaido Salm. Hatch., 16 : 137-43

(Some ecological studies on the kokanee salmon (*O. nerka* var. *adonis*) in Lake Shikotsu, Hokkaido. 1. Frequent occurrence of adult salmon with abnormal ovaries in 1956). *Ni En*

Examination of the relation between these occurrences and feeding conditions and average size of the individuals of the stock.

Tokui, T. (1961)

MF
8-08488

Sci. Rep. Hokkaido Salm. Hatch., 16 : 127-36

(Studies on the kokanee salmon. 4. Spawning migration of the kokanee salmon in Lake Shikotsu, Hokkaido, Japan). *Ni En*

Records, for years 1954 to 1960, of numbers of salmon caught and sex ratio, and of surface temperatures; proposed use of these data in development of a plan for improved conservation methods. Co 61-04702.

Enomoto, N. & Y. Tomiyasu (1962)

MF
8-08489

Bull. Jap. Soc. sci. Fish., 28 (5) : 510-3

(Studies on the external mucous substance of fishes. 7. Quantitative analysis of the mucus-polysaccharide from some fishes. 1. Neutral sugar composition). *Ni En*

The column chromatographic method using an ion exchange resin (Dowex 1) was applied to the quantitative analysis of neutral sugars in mucus-polysaccharide from 6 species of fishes. Co 61-11036.

Hamada, K. (1961)

MF
8-08490

Mem. Fac. Fish. Hokkaido, 9 (1) : 1-55

Taxonomic and ecological studies of the genus *Hypomesus* of Japan

The study is based on extensive data on meristic characters and body proportions, obtained from samples from several Japanese localities; it includes ecological data and observations (with photographs) on embryology and early larval life. Discussion on speciation and of the fishery problems.

AQUATIC STOCKS

Fukuda, Y. (1962)

MF
8-08491

Bull. Naikai Fish. Res. Lab., 18—indep. pag. 1-22

(Analysis of intermingling with an application to ecological study of fish populations). *Ni En*

Attempt to measure intermingling by statistical operations on frequency distributions of characters whose distributions overlap. Intermingling of Asian and North American salmon on the high seas is discussed. Issued also as: *Contr. Naikai Fish. Res. Lab.*, (101).

Hatanaka, M. & K. Iizuka (1962)

MF
8-08492

Bull. Jap. Soc. sci. Fish., 28 (3) : 305-13

(Studies on the fish community in the *Zostera* area. 3. Efficiency of production of *Sebastes inermis*). *Ni En*

Estimate of growth as g/kg/day and comparison with rates in other spp., conversion of small crustaceans into *Sebastes* biomass calculated from experimental results; discussion of the means of directing available food supplies of *Zostera* beds to spp. capable of most efficient conversion. Co 8-08434.

Hatanaka, M. & K. Iizuka (1962)

MF
8-08493

Bull. Jap. Soc. sci. Fish., 28 (1) : 5-16

(Studies on the fish community of the *Zostera* area. 1. The ecological order for feeding in the fish group related to the dominant species). *Ni En*

Study based on examination of stomach contents.

Balon, E. K. (1961)

F
8-08494

Biologiya, 16 (7) : 532-7

Zistovanie dennej aktivity rýb pomocou čereňom (Determination of the diurnal activities of fish by means of a set net). *Slovy Ry De*

Experiments carried out in a small lake in Moravia, Czechoslovakia, confirm relationship between catch and diurnal rhythm.

Miegel, H. (1961)

F
8-08495

Fischwirt, 11 (7) : 214-6

Über die Beurteilung von Futtermitteln für Forellen (How to judge fodder for trout)

Menzel, H.-U. (1961)

F
8-08496

Dtsch. Fisch.-Ztg., 8 (8) : 226-35

Über den Stand und die Aufgaben der Karpfenteichwirtschaft in der Deutschen Demokratischen Republik (On the state and problems of carp management in Eastern Germany)

Gives average yield/ha, percentage of carp production in the whole inland fishery, recommendations for improvement.

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- F
8-08497
- Eppel (1961)**
Dtsch. Fisch.-Ztg., 8 (8) : 246-51
 Ertragssteigerung der Speisefischproduktion durch Entenfreihaltung in der Binnenfischerei (Increase of yield in marketable fish production by open-area side lining of ducks)
 Describes beneficial effects of duck-carp associations.
- F
8-08498
- Brunner, G. (1961)**
Fischwirt, 11 (8) : 240-1
 Neure Erkenntnisse über die infektiöse Bauchwassersucht des Karpfens (Recent experiences with the infectious dropsy in carp)
- F
8-08499
- Bank, O. (1961)**
Fischwirt, 11 (8) : 250-4
 Der Kalkschock (The lime shock)
 Describes experiments with and effects of quick-lime applications of bottom of ponds with differing humus-content.
- F
8-08500
- Schlumpberger, W. (1961)**
Dtsch. Fisch.-Ztg., 8 (9) : 259-61
 Besatz mit Hechtbrut oder vorgestreckten Hechten? Ein Beitrag zur Frage der Rentabilität des Hechtbesatzes (Stocking with fry or with fingerlings of pike? A contribution to the question of rentability in pike stocking)
 Points out advantages of stocking with fry.
- F
8-08501
- Merla G. (1961)**
Dtsch. Fisch.-Ztg., 8 (9) : 271-3
 Ein Fall mangelnder Futteraufnahme bei einsömmrigen Karpfen (A case of deficient food intake in one-summer old carp)
 Describes observations and relates rate of consumption of artificial food to standing crop of bottom dwelling and planktonic animals.
- F
8-08502
- Rasmussen, J. (1961)**
Dtsch. Fisch.-Ztg., 8 (7) : 206-14
 Die Bedeutung und die Aufgaben der dänischen Forellenteichwirtschaft (The importance and the tasks of the Danish trout farm management)
- F
8-08503
- Spurny, J. (1961)**
Dtsch. Fisch.-Ztg., 8 (7) : 214-9
 Durch Nebenfische in den Karpfenteichen zur Erhöhung der Rentabilität und Produktivität der tschechoslowakischen Teichwirtschaftsbetriebe (Additional fishes in carp ponds increase the rentability and productivity in Czechoslovakian pond farms)
 Association of different species.

Ribiánszky, M. (1961)

F
8-08504

Dtsch. Fisch.-Ztg., 8 (7) : 220-4

Produktionserhöhung und Bekämpfung der Fischkrankheiten durch Wechselwirtschaft in den ungarischen Teichwirtschaften (Increase in production and control of fish diseases by means of rotation in Hungarian pond farms)

Points out the advantages of rotation system, especially on poor soils.

Müller, H. (1961)

F
8-08505

Dtsch. Fisch.-Ztg., 8 (2) : 37-42

Ertragssteigerung durch Kleinmaränenbesatz (Increased yield with white-fish stocking)

Discusses value of *Coregonus albula* for small water bodies.

Müller, W. (1961)

F
8-08506

Dtsch. Fisch.-Ztg., 8 (2) : 43-7

Neure Untersuchungen über die Quappe (*Lota lota* L.) (Recent investigations of burbot (*Lota lota* L.))

Gottwald, St. (1961)

F
8-08507

Dtsch. Fisch.-Ztg., 8 (2) : 48-52

Die Anwendung von Malachitgrün und Kochsalz beim Erbrüten und Haltern von Laichfischen in Polen (The application of malachite green and sodium chloride for incubation and storage of breeders in Poland)

Describes prophylactic treatments for control of fungus and gives technical details for the procedure.

Wiesner, E. R. (1961)

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8-08508

Allg. Fisch.-Ztg., 86 (19) : 583-6

Forellenzucht in Dänemark (Trout farming in Denmark)

Mann, H. (1961)

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8-08509

Allg. Fisch.-Ztg., 86 (13) : 402-4

Der Einsatz von Antibiotika in der Fütterung und in der Krankheitsbekämpfung bei Fischen (The application of antibiotics in feeding and disease-control of fish)

Reviews literature; reports on experiments with trout and carp and discusses results.

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- Deufel, J.** (1961)
Allg. Fisch.-Ztg., 86 (14) : 439-41
 Fütterungsversuche mit einem Fertigfutter für Forellen (Experiments with a ready-made food for trout)
 Describes experiments in concrete tanks and gives analysis of results and recommendations for their utilization.
- F
8-08511
- Bank, O.** (1961)
Allg. Fisch.-Ztg., 86 (15) : 466-8
 Fütterungsversuche von Kv mit Trockenfutter (Feeding carp fry with dry fodder; experiments)
 Describes aquarium experiments.
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8-08512
- Merla, G.** (1961)
Dtsch. Fisch.-Ztg., 8 (6) : 179-82
 Zur Bekämpfung der Karpfenlaus (*Argulus*) in der Teichwirtschaft (The control of the fish-louse (*Argulus*) in pond management)
 Reports on results of experiments with "Lindane" carried out in Eastern Germany. Emphasizes the toxic effect on minor pond animals.
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8-08513
- Müller, W.** (1961)
Dtsch. Fisch.-Ztg., 8 (6) : 183-7
 Der Einfluss der Kalkung auf das Wasser in der Teichwirtschaft Königswartha im Jahre 1960 (The influence of lime-application on the water of the pond farm of Königswartha during 1960)
- F
8-08514
- Menzel, H.-U.** (1961)
Dtsch. Fisch.-Ztg., 8 (6) : 188-90
 Zur Einführung einer einheitlichen Teichkartei für Karpfenteichwirtschaften (The introduction of a uniform card-index for carp culture)
- F
8-08515
- Grabda, J.** (1961)
Roczn. Nauk rol., 93-D, 445-59
 Zdrowotność ryb w potoku Trzebiocha (The health of fish in the Trzebiochia stream). *Ro*
 Parasites found on *Salmo trutta m. lacustris* (L.), *Gobio gobio* (L.), *Blicca björkna* (L.), *Alburnus alburnus* (L.), *Rutilus rutilus* (L.), *Esox lucius* (L.), *Perca fluviatilis* (L.), *Acerina cernua* (L.), *Gasterosteus aculeatus* (L.), and *Lota lota* (L.), are listed.
- F
8-08516
- Tesch, F. W.** (1961)
Dtsch. Fisch.-Ztg., 8 (10) : 299-301
 Die Möglichkeiten der Zanderertragssteigerung (The possibilities of raising the yield of pike perch)
 Discusses economical features in stocking natural waters and proposes minimum sizes in accordance with the different habitats.

Lieder, U. (1961)F
8-08517*Dtsch. Fisch.-Ztg.*, 8 (10) : 302-5

Urethan—eine krebserzeugende Verbindung (Urethane, a cancer producing compound)

Discusses pathogenic effects after induction of ethyl-carbonate and proposes substitutes to facilitate the stripping of spawners.

Amlacher, E. & W. Müller (1961)F
8-08518*Dtsch. Fisch.-Ztg.*, 8 (10) : 306-11Untersuchungen über den Einfluss unterschiedlicher Ernährung auf Körperproportionen, Hämoglobin, Serumeiweiss und Fettgehalt von *K₂* (Investigations on the influence of different nutrition on body proportions, hemoglobin, blood protein and fat content of two-year old carp)**Bontemps, S. (1960)**F
8-08519*Roczn. Nauk rol. (B)*, 75 (2) : 179-211Ocena stanu pogłowia certy z systemu rzeki Wisły (An estimation of *Vimba vimba* L. stocks in the Vistula River system). *Pl Ru En*

An account of general biological studies initiated as a prelude to a study of the population dynamics.

Radziej, J. (1960)F
8-08520*Roczn. Nauk rol. (B)*, 75 (2) : 223-35Występowanie sielawy w jeziorach obszaru przyległego do prawego brzegu dolnej Wisły (The occurrence of ablen (*Coregonus albula* L.) in lakes of the area neighboring the right bank of the lower Vistula). *Pl Ru En*

Also includes accounts of stocking of the lakes.

Horoszewicz, L. (1960)F
8-08521*Roczn. Nauk rol. (B)*, 75 (2) : 237-58Wartość kości gardłowych dolnych (Ossa faringea inferiora) jako kryteriów gatunkowego oznaczania ryb karpiowatych (Cyprinidae) (The value of lower pharyngeal arches as species criteria for defining fish of the Cyprinidae family). *Pl Ru En*

Presents and systematizes differences in shape of pharyngeal arches of cyprinid fish of the Vistula River.

Gottwald, S. (1960)F
8-08522*Roczn. Nauk rol. (B)*, 75 (2) : 259-71Niska zawartość tlenu w wodzie przyczyną puchliny woreczka żółtkowego (*Hydrocoele embrionalis*) u larw pstrąga tęczowego (*Salmo irideus* Gibb.) (Low oxygen level as a cause of blue-sac disease (*Hydrocoele embrionalis*) of rainbow trout alevins (*Salmo irideus* Gibb.)). *Pl Ru En*

Results demonstrate significance of proper oxygenation during embryonic development; constant oxygen deficit caused mass occurrence of constitutional blue-sac disease in the alevins.

Bernatowicz, S. (1960)F
8-08523*Roczn. Nauk rol. (B)*, 75 (2) : 273-82

Obserwacje nad wsiedlaniem sielawy do jeziora z wysokim pułapem siarkowodoru (Observations on stocking lakes with a high hydrogen sulphide ceiling with ablen (*Coregonus albula* L.)). *Pl Ru En*

Turoboyski, L. (1960)F
8-08524*Roczn. Nauk rol. (B)*, 75 (3) : 401-45

Prob określenia wpływu wysokich dawek niektórych związków chemicznych na narybek karpia (Attempt to determine the influence of high doses of some chemical compounds upon carp fry). *Pl Ru En*

Preliminary studies of the effects of: ammonia, blue vitriol, phenol, cresol, sodium sulphide, sodium carbonate, potassium chloride and sodium sulphate.

Disclos, P. (1963)F
8-08525*C.R. Acad. Sci., Paris*, 256 (1) : 280-1

Rôle régulateur morphogénétique du diencephale chez les amphibiens (Morphogenetic regulatory role of the diencephalon in Amphibia)

Preliminary note, reporting results of experiments on *Bufo viridis* and *Rana temporaria*.

Quillier, R., J. Maetz & M. Secondat (1963)F
8-08526*C.R. Acad. Sci., Paris*, 256 (1) : 271-3

Non-utilisation, par le poisson rouge (*Carassius carassius auratus* L.) des solutions à très haute dilution de glucose marqué (Non-utilization of highly diluted solutions of glucose concentrations by the goldfish, *Carassius carassius auratus* L.)

Preliminary note. Experiments demonstrate the incapacity of the fish to utilize glucose as it exists in natural waters, contrary to the theory of Putter.

Nose, T. (1961)F
8-08527*Bull. Freshw. Fish. Res. Lab., Tokyo*, 11 (2) : 29-42

(Determination of nutritive value of food protein on fish. 1. On the determination of food protein utilization by carcass analysis). *Ni En*

Growth of goldfish and rainbow trout and proximate composition of carcasses when fed with various diets; nitrogen metabolism.

Yamamura, Y. & S. Muto (1961)F
8-08528*Bull. Tohoku Fish. Res. Lab.*, 19 : 171-9

(Change of vitamin A and carotenoids during development of the salmon eggs). *Ni En*

Anon. (1963)

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8-08529*Dokl. Akad. Nauk SSSR*, 148 (2) : 481

Popravka k stat'e I. N. Ostroumovoi 'O pervom poiavlenii gemoglobina u embrionov raduzhnoi foreli (*Salmo irideus* Gibbons)' napechatannoi v DAN, tom 147, No. 1, 1962 g. (Errata to the article of I. N. Ostroumova 'The first appearance of haemoglobin in embryos of *Salmo irideus* Gibbons' (Doklady, 147, No. 1 (1962))

Er 8-06437.

Dekeyser, P.-L. (1962)

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8-08530*Bull. Inst. franç. Afr. noire (A)*, 24 (4) : 1190-241

Morphologie et biologie des oiseaux de l'ouest africain (Notes documentaires). V. Ardéiformes (Morphology and biology of birds of West Africa. (Documentary notes). V. Ardeiformes)

Remarks on geographical distribution, biology, ecology and parasitology.

Papadopol, M. (1962)

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8-08531*Stud. Cercet. Biol. (anim.)*, 14 (3) : 393-400

Date noi privind biologia reproducerii plăticii *Abramis brama* L. din cursul inferior al Dunării (New data on the biology of the reproduction of bream *Abramis brama* L. of the lower Danube). Ro Ru Fr

Report of observations on the size, weight and age at first maturity and conclusion that the bream of the lower Danube constitutes a sub-species of *Abramis brama danubii* Pavlov.

Gras, R. (1962)

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8-08532*Bull. Inst. franç. Afr. noire*, 24 (1) : 245-61

Étude biométrique des *Alestes baremoze* du bassin du Bas-Chari (Biometric study of *Alestes baremoze* from the lower Chari basin)

Considers various morphometric and meristic characters and makes a comparative study with *Alestes dentex*.

Nakano, T. (1961)

F
8-08533*Bull. Jap. Soc. sci. Fish.*, 27 (10) : 908-11

(Studies on the physiological chemistry of phosphorus compounds in fish muscle. 7. The effect of urethan on phosphorus compounds in muscle of gibel). Ni En

Narcotizing effect on *Carassius auratus* of various concentrations of urethan, phosphorus content of muscle of fish narcotized with these concentrations and differences of *post-mortem* changes in phosphorus content. Co 62-00982.

Ando, K. (1962)

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8-08534

Bull. Jap. Soc. sci. Fish., 28 (1) : 73-6

(Change of the lipid during development of rainbow trout eggs). Ni En

On 8 stages of development of rainbow trout eggs, moisture, ash, total nitrogen, total lipid, acetone soluble and insoluble lipid were determined. Unsaponifiable matter, acid value, iodine value and mean molecular equivalent of fatty acid in the acetone soluble lipid were determined.

Ando, K. (1962)

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Bull. Jap. Soc. sci. Fish., 28 (3) : 340-3

(Change in fatty acids composition of acetone soluble lipids during development of rainbow trout eggs). Ni En

Buchheim, C. E. (1962)

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Nature, Lond., 196 (4857) : 902-3

Lethal effects in tadpoles of *Xenopus laevis* (Daudin) after irradiation with high-energy electrons

Hayama, K. & S. Kuwabara (1962)

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(Studies on enzymes in fish blood. 2. Effect of organophosphorus insecticides on cholinesterase activity). Ni En

Consideration of the mechanism of inhibition by these compounds.

Nakano, T. & Y. Tsuchiya (1962)

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Bull. Jap. Soc. sci. Fish., 28 (2) : 173-8

(Studies on the physiological chemistry of phosphorus compounds in fish muscle. 9. Effect of loading on phosphorus compounds in fish muscle). Ni En

Lead weights, ranging from 2 to 25% of body weight, were attached to gibel (*Carassius auratus*) for periods up to 15 days; the fish were stored at 0°C after death and phosphorus compounds were estimated at intervals up to 72 hours: variation of *post-mortem* changes of these compounds according to weight placed on the fish was studied. Co 8-09283.

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Z. vergl. Physiol., 45 (4) : 309-5

Effect of starvation on contents of water and lipides of tissues of *Clarius lazera*

Yanni, M. (1961)

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Z. vergl. Physiol., 45 (1) : 50-5

Lipides and water content of the tissues of *Clarius lazera*

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Z. vergl. Physiol., 45 (1) : 56-60
 Studies on carbohydrate content of the tissues of *Clarius lazera*
- Jain, S. L.** (1961) F
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 Monogenea of Indian freshwater fishes. 11. Three new trematodes belonging to the genus *Dactylogyrus* Diesing, 1850
 Ill diagnosis of each sp. and key to Indian spp. of the genus. Ci 61-03237, Ci 59-7434, Ci 580877.
- Swarup, K.** (1961) F
8-08543
J. zool. Soc. India, 13 (2) : 108-12
 The fecundity of Indian shad, *Hilsa ilisha* (Hamilton)
 Regressions of fecundity on total weight, total length, and fork length.
- Chun, S. K.** (1962) F
8-08544
Bull. Fish. Coll. Pusan Univ., 4 (1/2) : 21-38
 (Studies on some trematodes whose intermediate hosts are fishes in the Naktoqn River). Ni En
 Tables showing spp. of metacercaria and the fish spp. in which they were found, giving the numbers of each sp. of fish infected with each sp. of metacercaria. Ill. description of the metacercaria.
- Tamura, O., T. Fujiki & K. Eto** (1962) F
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Bull. Fac. Fish. Nagasaki, 12 : 72-7
 (On the decrease of hematocrit value of fish by the extraction of blood). Ni En
 Test of rate of erythrocyte production.
- David, A.** (1961) F
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 Notes on the embryonic and larval development of the goonch, *Bagarius bagarius* (Hamilton)
 Notes on bionomics and fishing; observations on occurrence of eggs; ill. description of embryonic and larval development to 32-day fry, 22 mm in total length, and of 54 mm fingerling.
- Gamo, H.** (1961) F
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Bull. Jap. Soc. sci. Fish., 27 (10) : 893-6
 Further report on nutrient transmission through periblast in the medaka, *Oryzias latipes*
 Observations on yolk protrusion into the periblast in stages from just after fertilization to the late blastula.

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Cole, H. A. (1962)

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8-08549

Fish. News. Lond., (2556) : 4 p.

World resources ample; ocean farming feasible; British conservation—a myth

WFA 14 (1) : 14-1071. Fisheries resources—world.

Ranken, M. B. F. (1962)

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8-08550

Paper presented at First International Congress of Food Science and Technology, London, 18-21 September 1962

The seas as a solution to the world's food shortages

WFA 14 (1) : 14-1072. Fisheries resources—world.

Anon. (1962)

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Oceanus, 9 (1) : 24

Captain W. Scott Bray ; Harry Wexler

Obituary.

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Oceanus, 9 (1) : 16-7

Bigelow medal

Citation for the presentation of the H. B. Bigelow medal to Dr. J. C. Swallow.

Day, C. G. (1961)*

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Woods Hole Oceanographic Instn, 114 p.

A literature survey of the hydrography, bathymetry and fisheries of the Atlantic Ocean under the Atlantic missile range with an appendix on the Mona Island region

Campbell, G. D. & D. H. Davies (1960)

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Med. Proc., 6 (26) : 612-21

A case of shark attack with special reference to attempts to identify the causal species from the wounds

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Kang, J. W. (1962) M
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Bull. Fish. Coll. Pusan Univ., 4 (1/2) : 69-81
(Korean names for marine algae in Korea). Ni

Kwon, S. W. (1962) M
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(A study on the legal character of the fishing right). Ni

Aotuka, S. (1962) M
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(Studies on the decree of fishery-ground in Meiji). Ni

Dziedzic, A. (1962) MG
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Cah. Biol. mar., 3 : 417-31

Étude d'un compteur d'impulsions acoustiques, destiné à des mesures de rythmes d'activité biologique d'animaux marins (Study of a computer for acoustic impulsion devised to measure the rhythm of biological activity of marine animals)

Describes a new equipment.

Marette, D. (1962) MG
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Bull. Cent. Étud. Rech. sci., Biarritz, 3 (2) : 231-48

Comportement à la corrosion et à la protection cathodique de l'acier immergé dans une solution saline simple en mouvement (Effect on corrosion and cathodic protection of steel when immersed in moving saline solution). En Es

Marette, D. & M.-M. Cugnier (1962) MG
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Bull. Cent. Étud. Rech. sci., Biarritz, 4 (1) : 77-91

Comportement à la corrosion et à la protection cathodique de l'acier immergé dans une eau de mer naturelle en mouvement (Effect on corrosion and cathodic protection of steel when immersed in natural, moving sea water)

CR 8-08559.

Marette, D., A. Hache & M.-M. Cugnier (1961) MG
8-08561
Bull. Cent. Étud. Rech. sci., Biarritz, 3 (4) : 513-38

Contribution à l'étude de la protection cathodique de l'acier immergé en eau de mer (Contribution to the study of the cathodic protection of steel immersed in sea water). En Es

The first part contains details on the mechanism of cathodic protection of ordinary steel in sea water. In the second part, the behaviour of two types of soluble anodes in the same medium was examined, the one in pure zinc, the other one in an alloy of magnesium GA^3Z^1 . The advantages and drawbacks of their use are examined in each case.

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de Klasz, I. (1962)

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Bull. Inst. franç. Afr. noire (A), 24 (4) : 1242-5

Bibliographie micropaléontologique de l'Afrique noire occidentale depuis 1950 (foraminifères et ostracodes) (Micropaleontological bibliography of western central Africa ("Afrique Noire") since 1950 (foraminifers and ostracodes))

Bouder, H., A. Cavallo & M.-J. Bouder (1962)

MF
8-08564

Bull. Inst. océanogr. Monaco, (1240) : 66 p.

Poissons vénéneux et ichtyosarcotisme (Poisonous fish and ichthyosarcotism). En

Gives definitions and a historical summary and reviews the various types of fish poisoning on a world basis. In each case the aetiological, clinical, pathogenic and therapeutic problems involved are considered. They also give a list of the main toxic fish and review mussel poisoning. Bibliography.

Anon. (1962)

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Science, 137 (3535) : 1077

New products—Fish reaction timer

Measures interval between initiation of a stimulus and start of reaction. Equipment consists of tank with an illuminated, checker-board patterned, translucent floor, photomultiplier cell, spring operated hammer and electronic timer.

Anon. (1962)

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Fish. Newslett. Aust., 21 (11) : 18-9, 20

Uniform common names

List of common names of Australian fishes, with scientific names.

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Asashina, E. (1961)

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Bull. Mar. biol. Sta. Asamushi, 10 (4) : 251-6

Some notes on the mechanism of frost resistance in living animal and plant at climatic low temperature

Some general principles of cell freezing and frost injury are described from observations of the freezing process in a wide variety of plants and animals.

Koyama, H. & K. Nakamura (1961)

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Bull. Freshw. Fish. Res. Lab., Tokyo, 11 (2) : 19-28

(Test of transport eggs of ugui (*Tribolodon halonensis*)). Ni En

Trials of packing materials (moss), containers, prophylactic chemicals, transportation times and temperatures.

Wellisch, H. (1961)*

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Tel Aviv, Water Planning for Israel Ltd., 69 p.

A selected bibliography on fluid mechanics, hydrology and hydraulic engineering

Anon. (1962)

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Eau, Paris, 49 (8) : 221

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(On the error of Loran lines of position due to ground waves). Ni En

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New York, G. P. Putnam's Sons, 383 p.
Standard encyclopedia of the world's oceans and islands

Under the heading "Land and Sea" outlines the evolution of seas and land masses and the formation of islands, and describes the submarine topography, information newly acquired during the IGY (1959-60). Also discusses how the position of the seas has affected animal and vegetable development on the islands and continents. Articles describe the most important seas, islands and other features. A gazetteer supplements the articles with some 2,000 entries. Reference maps show the positions of the principal seas and islands and photographs demonstrate many aspects of sea and coast and human activities upon them. Includes a comprehensive index.

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Rapp. Comm. int. Mer Médit., 15 (1) : 31 p.

Plenary proceedings of meeting. Statutes as modified by the 16th general assembly. List of participants and officers of the committees; S.G.'s report and speeches of welcome, etc.; texts of resolutions.

- Villacrés, M. J. W.** (1961) M
8-09004
Boll. Soc. geogr. ital., Ser. 9, 2 (1/3) : 106-15

Le più importanti spedizioni scientifiche nell'arcipelago delle Galapagos (The most important scientific expeditions to the Galapagos Islands). It En

Short review.

- IHB** (1962) M
8-09005
Int. hydrogr. Bull., (3) : 88-120

Contains notes on activities of the Bureau and information on: charts, sailing directions, lights, tides and currents, work carried out and projected, new charts and new editions of charts.

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Rep. Freshw. biol. Ass., (30) : 99 p.

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8-09024

Lists of members, and their addresses, officers, members of committees and council and staff of the FBA; accounts of the FBA; reports of the council and of the director on research activities; list of publications; contains list of limnological papers published in the British Isles in 1961, arranged by subjects, and, within these, by authors.

The Water Research Association (1962)

Rep. Wat. Res. Ass., 7 : 43 p.

F
8-09025

Lists members of Council, Research Advisory Committee, research staff and visitors; membership and finances. Incl. reports of the Council Director of Research, special ref. to information and advisory services, work on biology, chemistry, hydrology, physics and plant processes, etc.

Fort, R. S. & J. D. Brayshaw (1961)*

London, Faber & Faber, 398 p.

Fishery management

F
8-09026

Whitely, G. P. (1960)*

Brisbane, Jacaranda Press, 127 p.

Native freshwater fishes of Australia

F
8-09027

Zoltán, K. & M. Dumitru (1961)

Bul. Inst. Cerc. pisc., 20 (4) : 43-55

Stațiunea de cercetări piscicole Tarcău (The fishculture research station at Tarcău). Ro Ru Fr

FG
8-09028

History and scientific activities of the station's program of research in relation to Roumanian inland-water fisheries.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

Ménaché, M. (1961)

Mem. Inst. sci. Madagascar (F), 4 : 167-73

Découverte d'un phénomène de remontée d'eaux profondes au sud de canal de Mozambique (Discovery of an upwelling of deep water to the south of the Mozambique Channel)

M
8-09029

Report (with charts and sections) of a longitudinal N-S section between the parallels of Comores and Durban.

- Niwa, M. & T. Senta** (1962) M
8-09030
Bull. Jap. Soc. sci. Fish., 28 (9) : 862-9
 (Ecological and oceanographical studies on the purse seine fishing grounds around Oki Is. 1. The surface current in autumn, 1961). *Ni En*

Estimate of current speed by means of drift-bottles.

- Saiki, S.** (1962) M
8-09031
Bull. Jap. Soc. sci. Fish., 28 (5) : 556-7

(Symposium on the radiation and fisheries problems. 2. Technique on control for the disposal of radioactive wastes, particularly on the discharge of radioactive materials into river and ocean). *Ni En*

Co 8-09332.

- Saito, K.** (1961) M
8-09032
Mem. Fac. Fish. Kagoshima, 10 : 9-14

Radiological survey in the Indian Ocean in 1961

Geographic location of radioactivity as found in plankton; measurement of half-life; distribution of radioactivity through organs of fish.

- Sameshima, M. & K. Saito** (1961) M
8-09033
Mem. Fac. Fish. Kagoshima, 10 : 15-22

(Studies on the radiological contamination of fishes, sea water and plankton in the southern region of Kagoshima Prefecture during the period from November 1959 to December 1960). *Ni En*

Identification and quantitative assessment of radioactive elements.

- Sasaki, T. et al.** (1962) M
8-09034
Bull. Jap. Soc. sci. Fish., 28 (5) : 489-96

On the instrument for measuring angular distribution of underwater radiance

III. description of the instrument and presentation of and discussion of some results.

- Costa, F. V.** (1962) M
8-09035
Bol. Pesca, Lisboa, 14 (75) : 59-70

As calemas do mar de Angola. Em que consistem e possibilidades de defesa (Swells of the Angola Coast. What they are and defence possibilities). *Pr*

Paper presented to the 5th national Portuguese fishery congress. Describes and discusses the origin of a special type of wave formed near the shore during periods of calm sea offshore; the phenomenon is interpreted as produced by storms and swell.

Aubert, M., R. Chesselet & D. Nordemann (1962)
Cah. C.E.R.B.O.M., (2) : 23-41

M
 8-09036

Mesures de radioactivité (α , β & γ) effectuées sur des échantillons de plancton et d'algues prélevés en Méditerranée, dans la zone côtière de la ville de Nice (Measurement of the radioactivity (α , β & γ) of plankton and seaweed collected in the Mediterranean Sea, in the coastal zone of Nice)

Blanc, J. J. (1961)

M
 8-09037

Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 5-12

Radioactivité des sédiments pyroclastiques sous-marins de l'Archipel du Santorin—comparaison avec quelques sédiments de Méditerranée Orientale (Radioactivity of the submarine pyroclastic sediments of the Santorin Archipelago—comparative study with other sediments from the eastern Mediterranean)

Taniguti, T. (1962)

M
 8-09038

Bull. Jap. Soc. sci. Fish., 28 (4) : 448-52

(A method for estimating the dissolved oxygen in the sea water polluted by organic matter). *Ni En*

Description of the method and results from its use are compared with results from use of other methods.

Uyeda, S. et al. (1962)

M
 8-09039

Oceanogr. Mag., 13 (2) : 185-9

9. Heat flow measurements over the Japan Trench during JEDS-4

Thermal conductivity of sediments. Issued also as: *Contr. Jap. Exped. deep Sea*, (37). Co 8-08039.

D'Arrigo, A. (1959)

M
 8-09040

Boll. Soc. geogr. ital., Ser. 8, 12 (6/8) : 293

Le spiagge italiane in erosione e le antistanti valli sottomarine (The sea erosion of the Italian beaches and the corresponding underwater valleys). *It En*

Hints at the presence of submarine canyons as the principal causes of the erosion in the corresponding beach.

Bonicelli Vardabaseo, S. (1960)

M
 8-09041

Boll. Soc. geogr. ital., Ser. 9, 1 (11/2) : 611-9

Recenti ricerche sulle coste della Sardegna e della Corsica (Recent investigations on the coasts of Sardinia and Corsica). *It En*

Points out the physio-geographical aspects of the changes which have taken place as the consequence of submergence and emergence.

Ostenso, N. A. (1962) M
8-09042
Thesis, Univ. of Wisconsin, 202 p.

Geophysical investigations of the Arctic Ocean Basin

DA 23 (4) : 1325-6. History or exploration and the development of geologic thought on the Arctic Ocean Basin is briefly reviewed. New bathymetric chart is constructed from a critical evaluation of all available data and the principal geomorphic features are described. 129 gravity stations established on arctic slope and over the adjoining Arctic Ocean by ski-equipped aircraft. Free Air and Bouguer iso-anomaly maps are presented and discussed. Airborne magnetic survey completed during April and May 1961 using a Varian nuclear-precession magnetometer mounted in a P2V-5 aircraft.

Polli, S. (1962) M
8-09043
Pubbl. Ist. talassogr. Trieste, 389 : 20 p.

Tabella di previsione delle maree per Trieste e per l'Adriatico settentrionale per l'anno 1963 (Tables of tidal forecasts for Trieste and for the northern part of the Adriatic Sea for the year 1963). *It En*

Polli, S. (1962) M
8-09044
Rapp. Comm. int. Mer Médit., 16 (3) : 649-54

Il progressivo aumento del livello marino lungo le coste del Mediterraneo (The increasing height of the sea-level along the Mediterranean coasts). *It*

Issued also as: *Pubbl. Ist. talassogr. Trieste*, (390).

Alberti, G. (1962) M
8-09045
Pubbl. Ist. talassogr. Trieste, 391 : 11 p.

Condizioni idrologiche della parte orientale della laguna di Grado (Hydrological conditions of the eastern part of the Grado Lagoon). *It En*

Seasonal data of temperature, salinity, density *in situ*, and transparency.

Polli, S. (1962) M
8-09046
Atti Conv. Ass. Geofis. ital., (11) : 343-53

Le maree ad Otranto, Manfredonia e Porto Corsini (The tides at Otranto, Manfredonia and Porto Corsini). *It En*

Monthly and seasonal tidal values are presented in order to examine the seasonal variations of the harmonic and non-harmonic tidal constants calculated after the Doodson proceeding. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (392).

Polli, S. (1962) M
8-09047
Ann. Geofis., 11 (1) : 69-76

Le sesse dell'Adriatico (The seiches of the Adriatic Sea). *It En*

The differential curve between the observed and the reckoned tide can be determined from the mareograms of Trieste; it is mainly composed of the seiches of the Adriatic Sea. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (393).

D'Ambrosi, C. (1960)

M

8-09048

Bull. Soc. adriatic. Sci., 51 : 9-25

Recenti misure mareografiche confermerebbero il persistere di tendenze epirogeniche in Istria (Recent mareographic data seem to confirm the persistence of epirogenetic tendencies in Istria). *It*

Faganelli, A. (1960)

M

8-09049

Bull. Soc. adriatic. Sci., 51 : 45-53

Nota preliminare sulla concentrazione dei sali nutritivi rilevata nel mare Adriatico durante la crociera del 1955 (Preliminary note on the concentration of nutritive salts in the Adriatic Sea during the 1955 cruise). *It En*

Confirms scarcity in phosphorus; nitrous and ammoniacal nitrogen in concordance, nitrates in concordance with phosphorus. High values in silicate content. The sea waters near the oriental coast have different physico-chemical characteristics than those near the occidental coast.

Chierego-Meng, N. & D. Bregant (1960)

M

8-09050

Bull. Soc. adriatic. Sci., 51 : 61-8

Analisi chimica e spettrografica preliminare di un campione di fondo dell'Adriatico centrale (Chemical and spectrographical analysis of a bottom sample taken in the central Adriatic Sea). *It En*

Results of the analysis of a 579 cm core collected at a depth of 218 m at about the centre of the Adriatic-Sea pit.

Picotti, M. & F. Mosetti (1961)

M

8-09051

Bull. Soc. adriatic. Sci., 51 (1, N.S.) : 73-7

Actualité sur les recherches de thalassographie dans la mer Adriatique (Actual state of the thalassographic researches in the Adriatic Sea). *Fr*

Comparison between recent data on tides and ancient theories.

Faure, L. (1959)

M

8-09052

Rev. Trav. Inst. Pêches marit., 23 (2) : 153-60

Variations de la température et de la salinité de l'eau de mer aux environs de Roscoff (Temperature and salinity variations in the waters around Roscoff)

Results of observations carried out from 1952 to 1958 to draw monthly charts and establish annual variations.

Berthois, L. (1959)

M

8-09053

Rev. Trav. Inst. Pêches marit., 23 (2) : 225-44

Remarques sur les rides sous-marines (Remarks on submarine ridges)

Study of morphology and sediments of the ridges of the La Chapelle bank, English Channel, and theory of their formation.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

M
8-09054

Gade, H. G. (1961)
Bol. Inst. oceanogr. Univ. Oriente, 1 (2) : 287-342

On some oceanographic observations in the southeastern Caribbean Sea and the adjacent Atlantic Ocean with special reference to the influence of the Orinoco River. Es

Results of two oceanographic cruises in Aug. 1960 and Apr. 1961, are presented and discussed. The main objectives have been to determine the course and influence of the Orinoco River water after being discharged into Atlantic and Caribbean waters.

M
8-09055

Gade, H. G. (1961)
Bol. Inst. oceanogr. Univ. Oriente, 1 (2) : 359-95

Further hydrographic observations in the gulf of Cariaco, Venezuela. The circulation and water exchange. Es

M
8-09056

Anon. (1962)*
TID-14390 : 15 p.

Research on the marine geology and biology of Tomales Bay, California

Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

M
8-09057

Wangersky, P. J. (1961)*
ORO-449 : 4 p.

The sedimentation of manganese in the open ocean

Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

M
8-09058

Howe, M. R. (1962)*
TID-14996 : 26 p.

Some direct measurements of the non-tidal drift on the continental shelf between cape Cod and cape Hatteras

Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

M
8-09059

Krylov, Yu. M. (Miller, J., Transl.) (1959)
12 p.

The relation between steepness and age of wind waves

En 59-3428. A functional relationship between mean heights and mean periods of waves in a storm region was established theoretically and checked by actual measurement data. Available from the Library of Congress, Washington, D.C.

- M
8-09060
- Ozmidov, R. V. (1959)**
JPRS : 6 p.

The calculation of a turbulent horizontal diffusion of admixture spots in a sea

En 583250 The equation of the horizontal turbulent diffusion is written in the form which indicated that the peripheral zones of an admixture spot that are most remote from each other are scattered by turbulent vortices more rapidly than are the central regions of the spot.

- M
8-09061
- Ruellan, F. & Y. Beigbeder (1963)**
C.R. Acad. Sci., Paris, 256 (7) : 1566-9

Quelques observations préliminaires sur la répartition des sédiments sous-marins en baie de Saint-Brieuc (Côtes-du-Nord) (Some preliminary observations on the marine sediments distribution in the bay of Saint-Brieuc)

- M
8-09062
- NAS (US) Committee on Effects of Atomic Radiation on Oceanography & Fisheries (1959)***
Publ. nat. Acad. Sci., Wash., (658) : 52 p.

Considerations on the disposal of radioactive wastes from nuclear-powered ships into the marine environment; a report

- M
8-09063
- Washington (State) Department of Fisheries (1960)***
Res. Bull. Wash. Dep. Fish., (6) : 161 p.

Reports on sulfite waste liquor in a marine environment and its effect on oyster larvae

- M
8-09064
- Donovan, D. T. & A. H. Stride (1961)**
Phil. Trans. (B) : 244 (712) : 299-300

An acoustic survey of the sea floor south of Dorset and its geological interpretation

- M
8-09065
- Parker, P. L. (1962)**
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 75-9
Zinc in a Texas bay

Using a dithizone method for organisms and sediment and a lanthanum precipitation for sea water, concentrations of zinc were determined in the water (8-15 ppb), sediments (10-18 ppm), underwater plants (60-100 ppm), and animals (9-130 ppm) predominating in the grass flats of Redfish Bay, a shallow marine estuary near Port Aransas, Texas.

- M
8-09066
- Volkman, C. M. & C. H. Oppenheimer (1962)**
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 80-96

The microbial decomposition of organic carbon in surface sediments of marine bays of the central Texas Gulf coast

Studies were made of 28 sediment profiles over a period of eight months in a shallow marine lagoon, Redfish Bay, near Aransas Pass, Texas. Organic carbon, bacterial populations, forty-day rates of organic carbon decomposition, sediment grain size and texture were measured in the cores from five stations.

- Hellier, T. R., Jr. & L. S. Kornicker** (1962) M
8-09067
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 212-5
 Sedimentation from a hydraulic dredge in a bay

Red gravel was used to mark the bay sediment surface at five stations in turtle grass flats near Aransas Pass, Texas, prior to the dredging of an intra-coastal waterway. Cores were taken and sediments were studied before, one week after dredging, and 18 months later, 22 to 27 cm of sediment (11 to 55% silt-clay) were deposited within 0.5 mile of the dredge, but effects at greater distance were negligible. Little sediment sorting was observed during dredging.

- California. University. Scripps Institution of Oceanography** M
8-09068
 (1960)*
 SIO Ref. 61-14

Surface water temperatures at shore stations, United States west coast and Baja California, 1960

- Jones, B. L.** (1962)* M
8-09069
Tech. Notes U.S. Bur. Stand., (155) : 26 p.
 The energy parameter B for strong blast waves.

- Armstrong, F. A. J. & E. I. Butler** (1963) M
8-09070
J. Mar. biol. Ass. U.K., 43 (1) : 75-8
 Chemical changes in sea water off Plymouth in 1961

The results of analysis of sea water samples from the International Hydrographic Station E I (50° 02' N, 4° 22' W) are given in graphical form and as integral mean values for the water column of 70 m.

- Muraour, P., J. Merle & J. Ducrot** (1962) MG
8-09071
Bull. Inst. océanogr. Monaco, (1245) : 21 p.

Étude sismique par réfraction dans le golfe du Lion (Seismic refraction study in the Lion Gulf). En

Measurements made on the continental shelf determined the presence of four layers. The large continental shelf in the occidental Mediterranean Basin is due both to the presence of the secondary limestones and to the configuration of the granitic basement.

- Miyoshi, H., T. Shirai & H. Kadota** (1962) MF
8-09072
Bull. Jap. Soc. sci. Fish., 28 (5) : 534-9

(Identification and determination of organic acids in marine and lake sediments). Ni En

Presents a method for extraction, identification and determination of these acids and, using this method, reports on acids in sediments in Maizuru Bay and lake Biwa, with observation on variation in concentration with depth from sediment surface.

Oguro, M. (1961)MF
8-09073*Bull. Fac. Fish. Hokkaido*, 12 (1) : 81-7

(Chemical studies on the current rip in Ishikari Bay caused by the Ishikari River flowing into that bay. 2. On the distribution of marine humus contents). *Ni En*

Co 8-09074.

Oguro, M. (1961)MF
8-09074*Bull. Fac. Fish. Hokkaido*, 12 (1) : 71-80

(Chemical studies on the current rip in Ishikari Bay caused by the Ishikari River flowing into that bay. 1. On the soluble organic matter). *Ni En*

Variation in amount of organic matter with depth and with distance from river mouth.

Robini, V., M. Roulet & J. Gaissa (1962)MF
8-09075*Cah. C.E.R.B.O.M.*, (2) : 45-57

La controle de la salubrit  des coquillages (Control of the edibility of shellfish)

Comments on the French legislation and reviews biotic and abiotic pollution.

Milo de Villagrazia, P. (1962)MF
8-09076*Boll. Pesca Piscic. Idrobiol.*, 16 (1) : 5-52

Ricerche fisico-chimiche e biologiche sui laghi salmastri pontini in relazione alla produttivit . Il lago di Sabaudia. (a) Idrografia e condizioni fisico-chimiche (Physico-chemical and biological researches of the Pontine brackish lagoons in relation to their productivity. The lake of Sabaudia. (a) Hydrography and physico-chemical conditions). *It Fr En*

Gives temperature, oxygen and pH seasonal variations. Compared to the lake's condition 20 years ago, the situation has improved.

Magaud -Borzi, L. & F. Li Greci (1962)MF
8-09077*Atti Soc. Pelor.*, 7 (3/4 Suppl.) : 763-8

La colimetria delle acqua dei laghi di Faro e di Ganzirri e delle sponde di mare antistanti, nei periodi di stabulazione dei mitili (Colimetric determinations in the waters of the Faro and Ganzirri lakes and of the sea waters in front of them during the stabulation of the mussels.) *It*

Results show highly polluted water.

Genovese, S. (1962)MF
8-09078*Atti Soc. Pelor.*, 8 (1/2) : 65-72

Sulle condizioni chimico-fisiche dello stagno di Faro in seguito all'apertura di un nuovo canale (Chemico-physical conditions of the lake of Faro in relation to the opening of a new channel). *It En*

The water of the lake has been remarkably modified.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

- Kato, K.** (1961) MF
8-09079
Bol. Inst. oceanogr. Univ. Oriente, 1 (2) : 343-58
Some aspects on biochemical characteristics of sea water and sediments in Mochima Bay, Venezuela. Es

Examines the relationship between organic sedimentation and the biochemistry and hydrography of the bay.

- Sauberer, F.** (1962) MF
8-09080
Mitt. int. Verh. Limnol., (11) : 77 p.
Empfehlungen für die Durchführung von Strahlungsmessungen an und in Gewässern (Recommendations for conducting radiation measurements at and in bodies of water)

A review of two subject and positive recommendations as part of the IAL's limnological methods series.

- A.C.H.** (1962) F
8-09081
Piscator, 16 (54) : 2-5
Water pollution. Regional standards for industrial effluents

Lists standards in Cape Province, South Africa, applicable to waste water or effluents so as to minimize injury to fish or fish foods.

- Jubb, R. A.** (1962) F
8-09082
Piscator, 16 (54) : 7
The biology of polluted waters
Re 61-00218.

- Hanks, R. W.** (1962) MF
8-09083
Progr. Fish-Cult., 24 (3) : 137-8
A mounting device for recording instruments

Describes a support for a thermograph for installation on coastal areas which will resist damage by violent coastal storms and movements of heavy ice masses.

- Kashiwada, K. & D. Kakimoto** (1962) F
8-09084
Bull. Jap. Soc. sci. Fish., 28 (3) : 352-60
(Studies on vitamin B₁₂ in natural water. 7. Relation between the fertility and the vitamin B₁₂ content of lakes). Ni En

Measurements of B₁₂ in 10 Japanese lakes and marshes to associate levels of B₁₂ content with trophic types. Co 60-8387, Ci 61-01578.

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- F
8-09085
- Luedemann, D. & H. Neumann** (1961)
Z. angew. Zool., 48 : 87-96
 Acute toxicity of present contact insecticides for freshwater animals
 NE 62-00086. CA 57 (2) : 2692.

- F
8-09086
- Drover, D. F. & H. M. Beshai** (1962)
Hydrobiologia, 20 (2) : 179-84
 A preliminary study of some chemical constituents of the bottom deposits of the White Nile

Reports on the nitrogen, phosphorus and calcium content of the bottom samples.

- M
8-09087
- Niwa, M., T. Senta & T. Kawaguchi** (1962)
Bull. Jap. Soc. sci. Fish., 28 (9) : 870-5
 (Zoological and oceanographical studies on the purse seine fishing grounds around Oki Is. 2. Occurrence of eggs and larvae of commercial fishes. A. Sardine, round herring and anchovy). Ni En

Data from vertical hauls from 50 m to surface; time of occurrence, numbers and distribution. Changes in abundance from 1957-1961. Co 8-09030.

- F
8-09088
- Herbert, D. W. M.** (1961)
Proc. Soc. Wat. Treatm. Examin., 10 : 135-61
 Freshwater fisheries and pollution control

Discussion with special reference to effects of waste solids in suspension and poisonous materials in solution and predictions of toxicity to fish, mainly in light studies of the water pollution.

- F
8-09089
- Eckstein, H.** (1963)
Arch. Hydrobiol. Suppl., 28 (5) : 48-118
 Untersuchungen über den Einfluss des Rheinwassers auf die Limnologie des Schluchsees (Investigations on the influence of the water from the Rhine River on the limnology of the Schluchsee Lake)

- F
8-09090
- U.S. Division of Water Supply & Pollution Control.**
Basic Data Branch (1961)*
 Washington.
 Report of pollution-caused fish kills, 1st Jan/Sept. 1960-1961

- FG
8-09091
- Horr, C. A.** (1962)*
 Washington, GPO : 20 p.
 Flame-photometric determination of strontium in natural water, chemistry of strontium in natural water

PLANKTON

PLANKTON

Verhaegue, M. P. (1962)

M
8-09092

Cah. C.E.R.B.O.M., (2) : 58-70

Étude chimique de la biomasse planctonique (Chemical study of the planktonic biomass)

Summary of chapter 2 of the author's thesis (Faculty of Medicine, Paris). Contains information on the elements and chemical compounds identified and their importance in metabolic process.

Luc, L.-M. (1961)

M
8-09093

Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 47-52

Étude des nématocystes des Trachyméduses méditerranéennes (Study of the nematocysts of the Mediterranean Trachymedusae)

On the basis of anatomy and morphology revises the systematics of the group.

Gaudy, R. (1961)

M
8-09094

Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 115-22

Note sur les stades larvaires de *Temora stylifera* Dana (Note on the larval stades of *Temora stylifera* Dana)

Describes the different stades of the nauplius and copepodite stages.

Chen, C. (1962)

M
8-09095

Thesis, Boston University Graduate School, 225 p.

Ecological studies of shell-bearing pteropods from the western part of the North Atlantic Ocean

DA 23 (4) : 1323. One hundred and seventy-seven plankton samples examined from the five ocean weather stations. Sixty-four core samples selected from the area between the continental shelf of the eastern coast of North America and the west side of the mid-Ocean Ridge of the northern part of the Atlantic Ocean.

Molder, K. (1962)

M
8-09096

Arch. Soc. zool.-bot. fenn. Vanamo, 15 (1/2) : 47-58

(Diatomaceae from Kenya, East Africa). *De*

BAgr. 26 (11) 86540.

Stevenson, R. R. & A. Collier (1962)

M
8-09097

Lloydia, 25 (2) : 89-93

Preliminary observations on the occurrence of air-borne marine phytoplankton

BAgr. 26 (11) 86545.

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- Fraser, J. H. (1961)*** M
8-09098
Mar. Res., (4) : 48 p.

The oceanic and bathypelagic plankton of the north-east Atlantic and its possible significance to fisheries

- Hollier, T. R., Jr. (1962)** M
8-09099
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 1-22

Fish production and biomass studies in relation to phytosynthesis in the Laguna Madre of Texas

Ci 62-03326. A study relating fish production to gross plant production in a shallow, frequently hypersaline coastal bay. Biomass estimates of the animal species were determined with a new population sampling device, the drap-net quadrat.

- Odum, H. T. & R. F. Wilson (1962)** M
8-09100
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 23-55

Further studies on reaeration and metabolism of Texas bays, 1958-1960

Day by day assay of total photosynthesis and respiratory consumption with the diurnal curve method involving the measurement of oxygen, total carbon dioxide, and other metabolically active constituents through 24-hour periods.

- Pierce, E. L. (1962)** M
8-09101
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 147-52
 Chaetognatha from the Texas coast

Three genera and 11 species of chaetognaths were identified from collections made in the bays and along the Texas coast. No marked difference was noted between the faunas of the west coast of Florida and the Texas coast.

- Marr, J. W. S. (1962)*** M
8-09102
Discovery Rep., 32 : 33-464

The natural history and geography of the Antarctic krill (*Euphausia superba* Dana)

- Wickstead, J. H. (1961)** M
8-09103
Fish. Publ., Lond., (16) : 199 p.

A quantitative and qualitative study of some Indo-west-Pacific plankton

The boats; Choice of stations; Apparatus; Methods; Validity of methods; Efficiency of the plankton nets; Climatic aspects; Hydrography; The plankton: The plankton community; Vertical migrations: general considerations; Water movements and plankton indicators; A comparison of the abundance of the zooplankton with that from other areas; The plankton and the fisheries.

PLANKTON

- McLaren, I. A.** (1964) M
8-09104
Canad. J. Zool., 42 (4) : 613-31

Zooplankton of Lake Hazen, Ellesmere Island, and a nearby pond, with special reference to the copepod *Cyclops scutifer* Sars

- Southward, A. J.** (1963) M
8-09105
J. Mar. biol. Ass. U.K., 43 (1) : 1-29

The distribution of some plankton animals in the English Channel and approaches. 3. Theories about long-term biological changes, including fish

Various biological and environmental changes that have been observed during the present century in the area of the western English Channel are briefly described, and the theories that have been put forward to account for them discussed and compared critically with one another. Co 9-06288.

- Manton, I., K. Oates & M. Parke** (1963) M
8-09106
J. Mar. biol. Ass. U.K., 43 (1) : 225-38

Observations on the fine structure of the *Pyramimonas* stage of *Halosphaera* and preliminary observations on three species of *Pyramimonas*

The three *Pyramimonas* species: *P. grossi*; *P. amyliifera* and *P. aff. abovata* were all originally obtained from the English Channel.

- Aubert, M.** (1962) MG
8-09107
Cah. C.E.R.B.O.M., (2) : 71-80

Applications thérapeutiques d'extraits planctoniques en oto-rhino-laryngologie (Medical use of planktonic extracts in oto-rhino-laryngology)

Reports clinical experiments.

- Roukhiyainen, M. I.** (1961) MG
8-09108
Trud. murman. morsk. biol. Inst., 3 (7) : 15-22
(Methods of collecting phytoplankton). Ru

BAgr. 26 (11) 86542.

- Cook, J. R.** (1961) MF
8-09109
Plant Cell Physiol., 2 : 199-202

Euglena gracilis in synchronous division. 1. Dry mass and volume characteristics

- Vacelet, E.** (1961) MF
8-09110
Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 111-3

La consommation d'oxygène du copépode *Tigriopus fulvus* (Fischer) (Oxygen consumption of the copepod *Tigriopus fulvus* (Fischer))

Describes method used and reports observations on laboratory experiments.

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Le Tourneau, M. (1961)

MF
8-09111

Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 123-51

Contribution à l'étude des Cladocères du plancton du Golfe de Marseille
(Contribution to the study of the Cladocera from the plankton of the Gulf of Marseille)

Contains data on the environment and methods of study, regional and geographical distribution, life cycle, reproduction and fertility of *Podon intermedius* and *Evdadne spinifera*.

De Angelis, C. (1962)

MF
8-09112

Boll. Pesca Piscic. Idrobiol., 16 (1) : 53-66

Ricerche fisico-chimiche e biologiche sui laghi salmastri pontini in relazione alla produttività. 2. Il lago di Sabaudia. (b) Osservazioni sul ciclo stagionale del fito plancton (Physico-chemical and biological researches of the Pontine brackish lagoons in relation to their productivity. (b) Observations on the seasonal cycle of phytoplankton). It Fr En

Lists species studied during the period 1952-1958. The most common species is *Prorocentrum micans*. Co 8-09076.

Simmons, E. G. & W. H. Thomas (1962)

MF
8-09113

Publ. Inst. Mar. Sci. Univ. Tex., 8 : 269-98

Phytoplankton of the eastern Mississippi delta

Phytoplankton samples were obtained from over 100 stations in the eastern Mississippi delta from Jun. 1955 through May 1957. Measurements were also made of chlorinity, temperature, suspended solids, soluble silica, phosphate, and water transparency. Five general areas were surveyed which ranged from fresh water in the Mississippi River to sea water in the open Gulf of Mexico.

Harris, J. E. (1963)

MF
8-09114

J. Mar. biol. Ass. U.K., 43 (1) : 153-66

The role of endogenous rhythms in vertical migration

Cook, J. R. (1961)

MF
8-09115

Biol. Bull., Woods Hole, 121 (2) : 277-89

Euglena gracilis in synchronous division. 2. Biosynthetic rates over the life cycle

Co 8-09109.

Gandhi, H. P. (1962)

F
8-09116

Hydrobiologia, 20 (2) : 128-50

Some fresh-water diatoms from Lonavla Hill-station in the Bombay-State (Maharashtra)

BENTHOS

- F
8-09117
- Pork, M.** (1961)
Hudrobiol. Uurimus., 2 : 63-107
 (List of diatoms (Bacillariophyta) of Estonian lakes (preliminary data)).
Eesti En

BAgr. 26 (11) 86541.

- F
8-09118
- Tosa, I.** (1960)
Trud. Inst. Biol. Akad. Nauk. latviisk. SSR, 18 : 173-86
 (Phytoplankton of Burtnieki Lake). *Lv Ru*

BAgr. 26 (11) 87223.

- F
8-09119
- Sommani, E.** (1962)
Boll. Pesca Piscic. Idrobiol., 16 (1) : 87-94
 Osservazioni sulle variazioni quantitative di entomotracci planctonici nel lago di Bracciano (Observations on the quantitative variations of planktonic Entomotraca in the lake of Bracciano). *It Fr En*

Experiments carried out from May 1958 to Nov. 1959 with special regard to samples collected at 35 m of depth.

- F
8-09120
- Hillbricht, A.** (1961)
Ekol. polsk. (A), 9 (3) : 39-60
 O charakterze występowania swobodnie plywających wrotków (Rotatoria) w hodowli akwariowej (The character of occurrence of free swimming Rotatoria bred in aquaria). *Pl En*

BENTHOS

- M
8-09121
- Kazihara, T.** (1962)
Bull. Jap. Soc. sci. Fish., 28 (6) : 565-9
 (Influences of the rainfall upon the living of *Styela plicata* (Lesueur)).
Ni En

Culture experiments to determine chlorinity requirements of this sp. and examination of its distribution in Sakibe Inlet in the light of these results and observations of the dilution of seawater in the inlet by run-off.

- M
8-09122
- Kimura, T.** (1961)
Bull. Fac. Fish. Hokkaido, 12 (1) : 41-8
 (A method for rapid detection of alginic acid digesting bacteria). *Ni En*

Description of the method.

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- Kimura, T.** (1961) M
8-09123
Bull. Fac. Fish. Hokkaido, 12 (1) : 33-40
 (Studies on marine agar-digesting bacteria). Ni En
 Taxonomic study.
- Maeshige, S.** (1962) M
8-09124
Bull. Jap. Soc. sci. Fish., 28 (3) : 326-34
 Chemical studies on the green alga, *Monostroma nitidum* Wittrock. 1.
 Component sugars of the mucilage. Pt. 1.
 Paper chromatography and some specific colour reactions.
- Markman, B.** (1961) M
8-09125
Exp. Cell Res., 25 : 224-7
 Differences in isotopic labeling of nucleic acid and protein in sea urchin
 embryos developing from animal and vegetal eggs halves
 CA 57 (11) : 14307.
- Fluegel, H. & C. Schlieper** (1962) M
8-09126
Kieler Meeresforsch., 18 : 51-66
 The influence of physical and chemical factors on the ciliary activity and
 the pumping rate of the mussel *Mytilus edulis*
 CA 57 (11) : 14308.
- Black, R. E.** (1962) M
8-09127
Biol. Bull., Woods Hole, 123 : 58-70
 Respiration, electron-transport enzymes, and Krebs-cycle enzymes in early
 developmental stages of the oyster *Crassostrea virginica*
 CA 57 (12) : 15629.
- Masaki, T. & J. Tokida** (1961) M
8-09128
Bull. Fac. Fish. Hokkaido, 12 (3) : 161-6
 Studies on the Melobesioideae of Japan. 5.
 Ill. morphological and histological description of crustaceous coralline
 spp., *Clathromorphum compactum* and *Lithothamnium lenormandii*.
- Lallier, R.** (1962) M
8-09129
C.R. Acad. Sci., Paris, 254 : 738-40
 The effect of 1-thiosorbitol on mitosis and development of the egg of the
 sea urchin
 CA 57 (12) : 15630.

- Hinegardner, R. T.** (1961) M
8-09130
Exp. Cell Res., 25 : 341-7
 The deoxyribonucleic acid (DNA) content of isolated sea urchin egg nuclei
 CA 57 (12) : 15631.
- Hultin, T.** (1961) M
8-09131
Exp. Cell Res., 25 : 405-17
 Activation of ribosomes in sea urchin eggs in response to fertilization
 CA 57 (12) : 15631.
- Hagstrom, B. E. & J. Runnstrom** (1962) M
8-09132
Ark. Zool., 15 (2) : 219-28
 Release of a jelly-precipitating factor by exposure of sea urchin eggs to ribonuclease
 CA 57 (12) : 15632.
- Immers, J.** (1961) M
8-09133
Exp. Cell Res., 24 : 356-78
 Comparative study of the localization of incorporated C¹⁴-labeled amino acids and S³⁵O₄ in the sea urchin ovary, egg and embryo
 CA 57 (10) : 13036. The species employed were *Echinus esculentus*, *Paracentrotus lividus*, *Psammechinus miliaris*, and *Sphaerechinus granularis*.
- Bannard, R. A. B. & A. A. Casselman** (1961) M
8-09134
Canad. J. Chem., 39 : 1879-87
 Clam poison. 2. Purification of clam poison residues of low toxicity by a heavy-paper technique
 CA 57 (7) : 9018.
- Wootton, J. A. M. & L. D. Wright** (1962) M
8-09135
Comp. Biochem. Physiol., 5 : 253-64
 Comparative study of sterol biosynthesis in Annelida
 CA 57 (7) : 9019. Antibiotics and sulfanilamide did not interfere with the biosynthetic activity of *Nereis* as contrasted with their effect on *Arenicola marina*.
- Subrahmanyam, C. B.** (1962) M
8-09136
Proc. Ind. Acad. Sci. (B), 55 (3) : 152-61
 Oxygen consumption in relation to body weight and oxygen tension in the prawn *Penaeus indicus*
 CA 57 (7) : 9021.

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8-09137
- Costello, L. C. & H. Brown** (1962)
Exp. Parasit., 12 : 33-40
 Aerobic metabolism of unembryonated eggs of *Ascaris lumbricoides*
 CA 57 (7) : 9024.
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8-09138
- Mercer, E. H. & L. Wolpert** (1962)
Exp. Cell Res., 27 : 1-13
 The cortex of the sea urchin (*Psammechinus miliaris*) egg
 CA 57 (9) : 11679. The biological and biochemical characteristics of this egg are considered.
- M
8-09139
- Butler, L. O., Y. A. Rees & S. D. Elek** (1962)
Comp. Biochem. Physiol., 6 : 105-10
 The serum proteins of *Xenopus laevis*
 CA 57 (9) : 11680.
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8-09140
- Brahma, S. K. & A. Basu** (1962)
Exp. Cell Res., 27 : 178-80
 Radioautographic observation on the body wall of *Hydra*
 CA 57 (9) : 11681.
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8-09141
- Okaichi, T. & Y. Hashimoto** (1962)
Bull. Jap. Soc. sci. Fish., 28 (9) : 930-5
 Physiological activities of nereistoxin
 Bioassay of this substance isolated from a marine annelid *Lumbriconereis heteropoda* Marenz.
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8-09142
- Sarojini, S.** (1961)
J. zool. Soc. India, 13 (2) : 188-93
 The androgenic organ in some Indian Crustacea. 1.
 Ill. description of this organ in 13 spp. of Decapoda and 1 of Isopoda.
- M
8-09143
- Sakai, S.** (1962)
Bull. Jap. Soc. sci. Fish., 28 (9) : 891-8
 (Ecological study of the abalone, *Haliotis discus hannai* Ino. 3. Study of the mechanism of production of the abalone in the region of Onagawa Bay).
 Ni En
 Relation between abalone growth and temperature, salinity and seaweed on which the abalone feeds; relation between abalone catch and growth.
 Co 8-11119.

BENTHOS

Sakai, S. (1962)

Bull. Jap. Soc. sci. Fish., 28 (9) : 899-904

(Ecological studies on the abalone, *Haliotis discus hannai* Ino. 4. Studies on the growth). Ni En

M

8-09144

Rearing experiments to ascertain seasonal changes in growth and fatness and to relate these with environmental factors such as temperature and food; determination of growth rate by age-determination using rings in the shell. Co 8-09143.

Hayes, D. K. & W. D. Armstrong (1961)

Biol. Bull., Woods Hole, 121 (2) : 307-15

The distribution of mineral material in the calcified carapace and claw shell of the American lobster, *Homarus americanus*, evaluated by means of micro-roentgenograms

M

8-09145

Maynard, D. M. (1961)

Biol. Bull., Woods Hole, 121 (2) : 316-29

Thoracic neurosecretory structures in Brachyura. 1. Gross anatomy

M

8-09146

The first of three papers which re-examine these systems in the brachyurans. It describes the anatomy of three neurohaemal structures in the crab thorax of 9 spp. from five families, Cancridae, Xanthidae, Portunidae, Grapsidae, Ocypodidae, and suggests a correlation between PO volume and aspects of behaviour.

Rulen, O. (1961)

Biol. Bull., Woods Hole, 121 (2) : 347-53

Cobalt and glutathione in the preservation of fertility and life of sand dollar eggs

M

8-09147

Reports results of research on *Dendraster excentricus*.

Vacelet, J. (1961)

Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 21-45

Spongiaires (Demosponges) de la région de Bonifacio (Corse) (Sponges (Demosponges) of the Bonifacio region (Corsica))

M

8-09148

List of 60 spp. collected during the cruise of the 'Antedom' (August 1960) including *BASIECTYON pilosus* n.g., n. sp., on geographical distribution and ecology.

Tokioka, T. (1961)

Bull. Mar. biol. Sta. Asamushi, 10 (4) : 241-5

Appendicularians of the Japanese Antarctic Research Expedition

M

8-09149

Identity and distribution discussed briefly.

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8-09150
- Tsuchiya, Y. & Y. Suzuki (1962)**
Bull. Jap. Soc. sci. Fish., 28 (2) : 231-4
 (Biochemical studies of the ascidian, *Cynthia roretzi* v. Drasche. 8. On the general components). Ni En

Values for height and for total, test, muscle and viscera weight; proximate constitution. Co 8-09152.

- M
8-09151
- Tsuchiya, Y. & Y. Suzuki (1962)**
Bull. Jap. Soc. sci. Fish., 28 (2) : 222-6
 (Biochemical studies of the ascidian, *Cynthia roretzi* v. Drasche. 4. The presence of pseudokeratin in test). Ni En

Enzymic digestion; amino acid composition. Ci 8-09152.

- M
8-09152
- Tsuchiya, Y. & Y. Suzuki (1962)**
Bull. Jap. Soc. sci. Fish., 28 (2) : 227-30
 Biochemical studies of the ascidian *Cynthia roretzi* v. Drasche. 7. Isolation of mucoprotein from test. Ni En

Identification by paper electrophoresis, color reactions precipitation; identification of amino acids and sugars of the hydrolysates by paper chromatography. Co 8-09151.

- M
8-09153
- Tsujino, I. (1961)**
Bull. Fac. Fish. Hokkaido, 12 (1) : 59-65
 (Studies on the compounds specific for each group of marine algae. 2. Extraction and isolation of characteristic ultra-violet absorbing material in Rhodophyceae). Ni En

Co 8-09154.

- M
8-09154
- Tsujino, I. & T. Saito (1961)**
Bull. Fac. Fish. Hokkaido, 12 (1) : 49-58
 (Studies on the compounds specific for each group of marine algae. 1. Presence of characteristic ultraviolet absorbing material in Rhodophyceae). Ni En

- M
8-09155
- Tsuruga, H. (1962)**
Bull. Jap. Soc. sci. Fish., 28 (3) : 372-8
 Occurrence of radoruthenium in the laver, *Porphyra tenera*, and other seaweeds

Methods and results.

- Wada, S. K.** (1961) M
8-09156
Mem. Fac. Fish. Hagoshima, 10 : 1-8
 Fertilizability of *Crassostrea* and *Pinctada* eggs as related to germinal vesicle breakdown

Methods, appropriate to each species, of bringing eggs obtained from excised ovary to fertilizable condition; discussion of relation between cortex maturation and nuclear breakdown, events related to fertilizability.

- Rossi, L.** (1959) M
8-09157
Ann. Mus. Stor. nat. Genova, 71 : 203-25
 Le specie di *Eunicella* (Gorgonaria) del golfo di Genova (The species of *Eunicella* (Gorgonaria) from the gulf of Genoa). *It En*

These spp. are present in the bay of Genoa: *E. stricta*, *E. graminea*, *E. cavolinii* and *E. verrucosa*. Ecological and biological remarks.

- Rossi, L.** M
8-09158
Boll. Ist. Zool. Univ. Torino, 6 (3) : 81-9
 Catalogo dei tipi di Madreporarii esistenti nel Musso Zoologico di Torino (List of Madreporaria existing in the Zoological Museum of Turin). *It*

Lists 50 spp., all collected in the Caribbean Sea.

- Candussio, R.** (1960) M
8-09159
Atti Mus. Stor. nat. Trieste, 22 (2) : 45-54
 (Composizione chimica della *Zostera marina* L. (Chemical composition of *Zostera marina* L.)

Tables with the results of the analysis which show that the *Zostera* has no practical importance.

- Costanzo, G.** (1962) M
8-09160
Atti Soc. Pelor., 8 (1/2) : 235-47
 Esame citrometrico degli ovociti in accrescimento di *Asterias glacialis* (Echin. Aster.) (Cytometric analysis of the oocytes during the growth of *Asterias glacialis* (Echin. Aster.)). *It En*

The behaviour of the nucleus and the n/N ratio differ from those of the Echinodermata species already observed; the nuclear growth, on the contrary, is the same.

- Reys, J. P.** (1961) M
8-09161
Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 153-7
 Deux Ophiures nouvelles: *Amphipholis tissieri* et *Ophiomyces peressi* (Two new Ophiura: *Amphipholis tissieri* and *Ophiomyces peressi*)

Collected from the stomach of gurnards caught SW of the small island of Planier and at the Gorringer Bank.

- Fouque, G.** (1961) M
8-09162
Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 159-61
 Notes sur la présence de *Pyura vittata* (Stimpson) dans la région de Marseille
 (Note on the presence of *Pyura vittata* (Stimpson) in the Marseille region)

- Belloc, G.** (1962) M
8-09163
Bull. Inst. océanogr. Monaco, (1246) : 8 p.
 Catalogue des types de Pélécypodes du Musée océanographique de Monaco
 (Catalogue of types of Pelecypoda at the Oceanographic Museum of Monaco)

Ci 1897 Dautzenberg, P. & H. Fischer; 1906 Dautzenberg, P. & H. Fischer; 1912 Dautzenberg, P. & H. Fischer; 1925 Dautzenberg, P.; 1927 Dautzenberg, P. The collections include 33 types of genera—*Monia*, *Isomonina*, *Chlamys*, *Amussium*, *Arca*, *Pectunculus*, *Leda*, *Venus*, *Anaitis*, *Malletia*, *Thyasira*, *Diplodonta*, *Phacoides*, *Arcopagia*, *Syndesmya*, *Cuspidaria*, *Verticordia*, *Thracia*, *Poromya*.

- Azis, K. M. S. & H. J. Humm** (1962) M
8-09164
J. Elisha Mitchell sci. Soc., 78 (1) : 55-63
 Additions to the algal flora of Beaufort, N.C., and vicinity

B Agr. 26 (11) 86531.

- Javornicky, P.** (1962) M
8-09165
Preslia, 34 (1/2) : 98-113
 Two scarcely known genera of the class Dinophyceae: *Bernardinium* chodat and *Cryptocodinium biecheler*

B Agr. 26 (11) 86536.

- Sarà, M.** (1960) M
8-09166
Ann. Ist. Zool. Univ. Napoli, 11 (2) : 1-8
 Considerazioni sulla distribuzione ed ecologia dei Poriferi nelle grotte
 (Considerations on the distribution and ecology of Porifera in grottoes).
It Fr

- Sarà, M.** (1960) M
8-09167
Ann. Ist. Zool. Univ. Napoli, 11 (5) : 11-6
Pseudotrachya oxystyla n. sp. (Demospongiae) e suo rinvenimento nella
 zona litorale dell'isola d'Ischia (*Pseudotrachya oxystyla* n. sp. (Demospongiae)
 found in the littoral zone of Ischia). *It En*

Describes the second species of the genus *Pseudotrachya*. The finding of this species is of ecological and of zoogeographical interest.

M

8-09168

Sarà, M. (1960)*Ann. Ist. Zool. Univ. Napoli*, 11 (7) : 1-22

Specie nuove di Demospongia provenienti da acque superficiali del golfo di Napoli (New species of Demospongiae from the surface waters of the bay of Naples). *It En*

Describes 6 new spp., *Nethea dissimilis*, *Triptolemus simplex*, *Cliona copiosa*, *Crella nodulosa*, *Microciona toxivaria* and *Microciona toxistyla*; all found at a depth of 0.1 metre.

M

8-09169

Sarà, M. & L. Siribelli (1961)*Ann. Ist. Zool. Univ. Napoli*, 12 (3) : 1-39

La fauna di Poriferi delle secche del golfo di Napoli. 1. La secca della Gaiola (The Porifera fauna of the shoals of the bay of Naples. 1. The shoal of the Gaiola). *It En*

86 spp. were found: 60 from the pebbly zone and 41 from the rocky environment. 14 spp., of which 13 are from the pebbly zone, have been described for the first time. Ecological observations.

M

8-09170

Sarà, M. (1961)*Ann. Ist. Zool. Univ. Napoli*, 12 (4) : 1-7

DIACTINOLOPHA genere nuovo di Plakinidae per *D. moucharmonti* sp. n. rinvenuta nel golfo di Napoli (*DIACTINOLOPHA moucharmonti* new genus and new species of Plakinidae (Demospongiae) found in the bay of Naples). *It En*

Describes and discusses the similarities between the genera *Diactinolopha* and *Placinolopha*.

M

8-09171

Siribelli, L. (1961)*Ann. Ist. Zool. Univ. Napoli*, 12 (4) : 1-12

Le *Microciona* (Demospongiae) del golfo di Napoli (The *Microciona* (Demospongiae) of the bay of Naples). *It En*

Taxonomic data of 14 spp. are summarized. Their diagnostic characters have been compared and their affinities discussed.

M

8-09172

Renzoni, A. (1962)*Boll. Pesca Piscic. Idrobiol.*, 16 (1) : 67-86

Comportamento di *Mytilus galloprovincialis* Lamk. e *Ostrea edulis* L. (Larve e adulti) in differenti condizioni ambientali sperimentali (Behaviour of *Mytilus galloprovincialis* Lamk. and *Ostrea edulis* L. (Adults and larvae) in different experimental environmental conditions). *It Fr En*

They all show considerable adaptability to variations of temperature and salinity, but low temperatures are always better tolerated than high ones (above 25°C). The optimum salinity for development corresponds to the average salinity of the sea or slightly lower salinity.

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Genovese, S. (1962)

M

8-09173

Atti Soc. Pelor., 8 (1/2) : 47-64

La batteriologia marina e i suoi problemi (Marine bacteriology and its problems). *It*

Conference held in the Zoological Station of Naples on 12 Mar. 1962.

De Vincentiis, M. (1962)

M

8-09174

Atti Soc. Pelor., 8 (1/2) : 189-98

Ulteriori indagini istospettrografiche e citochimiche su alcuni aspetti dell'ovogenesi di *Ciona intestinalis* (Further histospectrographical and cytochemical researches on the oogenesis of *Ciona intestinalis*). *It En*

Bruni, A. & G., & G. Lamonica (1962)

M

8-09175

Atti Soc. Pelor., 8 (1/2) : 225-33

Cultura massiva di alghe. Nota 5. Sulla presenza di un fattore ostacolante la produzione di pigmento (APF) di *Serratia marcescens* in estratti di *Scenedesmus quadricauda* (Massive algal culture. Note 5. On the presence of an inhibiting factor for the pigment production (APF) in *Serratia marcescens* in *Scenedesmus quadricauda* extracts). *It En*

The proof of the presence of an anti-pigmentation factor (APF) might be useful as an indirect way to show the toxic action of algal extracts.

Kestner, F. J. T. (1962)

M

8-09176

Geogr. J., 128 (4) : 457-78

The old coastline of the Wash

Describes how various old salt-marsh edges were traced as part of a field study into the processes of salt-marsh advance in this area and establishes that salt-marsh advance is not a continuous process, but that foreshore saltings tend to become stabilized.

Choe, S. (1963)

M

8-09177

Nature, Lond., 197 (4864) : 306-7

Daily age markings on the shell of cuttlefishes

Choe, S. (1963)

M

8-09178

Nature, Lond., 197 (4864) : 307

Rearing of cuttlefishes and squids

Gives details of techniques for rearing 3 spp. of cuttlefish: *Sepia esculenta* Hoyle, *Sepia subaculeata* Sasaki, *Sepiella maindroni* de Rochebrune; and 2 spp. of squid: *Sepioteuthis lessoniana* Lesson and *Euprymna beryii* Sasaki.

Hagiwara, S. & K. Naka (1964)

M

8-09179

J. gen. Physiol., 48 (1) : 141-63

The initiation of spike potential in barnacle muscle fibers under low intracellular Ca^{++}

- Pourriot, R.** (1963) M
8-09180
C.R. Acad. Sci., Paris, 256 (7) : 1603-5
 Utilisation des algues brunes unicellulaires pour l'élevage des Rotifères
 (Utilisation of brown unicellular algae for cultivation of rotifers)
- Preliminary note reporting results of cultivation experiments of *Gastropus*,
Epiphanes, *Synchaeta*, *Polyarthra* and *Keratella*, using *Synura* sp. and *Cryptomonas curvata*.
- Tchernigovtzeff, C.** (1963) M
8-09181
C.R. Acad. Sci., Paris, 256 (7) : 1611-3
 Sur l'évolution de la crise miotique épithéliale chez *Leander serratus*
 (Pennant) Crustacé Décapode (On the evolution of the epithelial myotic
 crisis in *Leander serratus* (Pennant) Crustacea, Decapoda)
- Ci 59-1407. Preliminary note.
- Colebrook, J. M. et al.** (1963)* M
8-09182
Bull. mar. Ecol., 6 (2)
 Continuous plankton records: contributions towards a plankton atlas of the
 north-eastern Atlantic and the North Sea
- Quayle, D.** (1960)* M
8-09183
Handb. B.C. Mus., (17) : 104 p.
 The intertidal bivalves of British Columbia
- Tomlinson, J. T. & W. A. Newman** (1960)* M
8-09184
Proc. U.S. nat. Mus., 112 (3445) : 517-26
Lithoglyptes spinatus, a burrowing barnacle from Jamaica
- Uchio, T.** (1960)* M
8-09185
Biol. Results Jap. antarct. Exped., (12) : 19 p.
 Benthonic Foraminifera on the Antarctic Ocean
- Fell, H. B.** (1961) M
8-09186
Mem. N.Z. oceanogr. Inst., (18) : 79 p.
 The fauna of the Ross Sea. Part 1. Ophiuroidea
- Oppenheimer, C. H. & H. W. Jannasch** (1962) M
8-09187
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 56-60
 Some bacterial populations in turbid and clear sea water near port Aransas,
 Texas

Direct counts were made of bacteria in clear and turbid sea waters including waters of the Gulf beach, the Laguna Madre, and the Redfish Bay turtle grass areas. Counts ranged from 900,000 per ml outside the Gulf surf to 28,800,000 in turbid water along the shore of Redfish Bay. Counts were used to estimate bacterial biomass (0.2 to 6 g/m³) and potential oxygen demand.

- M
8-09188
- Sorenson, L. O. & J. T. Conover** (1962)
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 61-74
 Algal mat communities of *Lyngbya confervoides* (C. Agardh) Comont

Studies of ecology, zonation, and growth were made of the extensive mats in the shallow lagoonal flats of bays in south Texas. Five zones were described in vertical profile, and microphotographs were made of representative filaments, include Zone A at the surface with dark sheaths, Zone C with thick clear sheaths, and Zone E with thin sheaths and contracted protoplasts.

- M
8-09189
- Gifford, C. A.** (1962)
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 97-125
 Some aspects of osmotic and ionic regulation in the blue crab, *Callinectes sapidus*, and the ghost crab, *Ocypode albicans*

Analyses were made of constituents of body fluids in the ghost crab, and the blue crab, relative to hypo- and hypersaline environments in the bays of south Texas. Blood and urine concentrations of Na, K, Ca, Mg, Cl, and SO₄ are given for *Ocypode albicans* in concentrations from 14 to 197 per cent sea water (% S.W.).

- M
8-09190
- Lee, B. D. & W. N. McFarland** (1962)
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 126-42
 Osmotic and ionic concentrations in the mantis shrimp *Squilla empusa* Say

Osmotic and ionic concentrations of body fluids and muscle were analyzed as a function of environmental salinity.

- M
8-09191
- Humm, H. J. & H. H. Hildebrand** (1962)
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 227-68
 Marine algae from the Gulf coast of Texas and Mexico

An annotated list of 193 spp. is given as a result of collections made along the coast of the Gulf of Mexico between Rockport, Texas, and the southern part of the state of Vera Cruz, Mexico. One hundred and sixteen of these spp. were recorded for Texas and 140 for Mexico.

- M
8-09192
- Rice, W. H. & L. S. Kornicker** (1962)
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 366-93
 Mollusks of Alacran Reef, Campeche Bank, Mexico

Photographic plates and descriptions are given for a collection of 90 spp. of gastropods and 40 spp. of pelecypods, to aid in further study of the Campeche Bank.

- M
8-09193
- Yaldwyn, J. C.** (1961)*
Rec. Dom. Mus., Wellington, 4 (1) : 6 p.
 A scyllarid lobster, *Arctides antipodarum* Holthuis, new to New Zealand waters

- Southward, A. J. & E. C. Southward** (1963) M
8-09194
J. Mar. biol. Ass. U.K., 43 (1) : 57-64
 Notes on the biology of some Pogonophora

Observations on living pogonophores obtained from the continental slope to the south-west of the British Isles and from the continental shelf off the west coast of Ireland.

- Millar, R. H.** (1963) M
8-09195
J. Mar. biol. Ass. U.K., 43 (1) : 71-4
 The development and larva of *Styela coriacea* (Alder and Hancock)

Larvae of this ascidian were obtained by artificial fertilization and from an incubating adult.

- Kain, J. M.** (1963) M
8-09196
J. Mar. biol. Ass. U.K., 43 (1) : 129-51
 Aspects of the biology of *Laminaria hyperborea*. 2. Age, weight and length

- Patel, S. & C. P. Spencer** (1963) M
8-09197
J. Mar. biol. Ass. U.K., 43 (1) : 167-75
 The oxidation of sulphide by the haem compounds from the blood of *Arenicola marina* L.

- Barnes, H., M. Barnes & D. M. Finlayson** (1963) M
8-09198
J. Mar. biol. Ass. U.K., 43 (1) : 181-91
 The metabolism during starvation of *Balanus balanoides*

- Barnes, H., M. Barnes & D. M. Finlayson** (1963) M
8-09199
J. Mar. biol. Ass. U.K., 43 (1) : 193-219
 The seasonal changes in body weight, biochemical composition, and oxygen uptake of two common boreo-arctic cirripedes, *Balanus balanoides* and *B. balanus*

- Kawabata, T., T. Yoshida & Y. Kubota** (1962) MF
8-09200
Bull. Jap. Soc. sci. Fish., 28 (3) : 344-51
 Paralytic shellfish poison. 1. A note on the shellfish poisoning occurred in Ofunato City, Iwate Prefecture, in May, 1961

Epidemiological features of the outbreak assay of toxicity; discussion of the change in toxicity and the source of the poison.

Shibata, T. & K. Yoshimura (1962)

MF
8-09201

Bull. Jap. Soc. sci. Fish., 28 (5) : 514-7

(Enzymatic studies on the muscle of aquatic animals. 4. Limiting step in aerobic FDP glycolysis and the formation of α -glycerophosphate in fish and mollusk muscle)

Enzyme solutions prepared from skeletal muscle of two carps, mantle of squid and adductor muscle of pecten. Examination of the effect of 3-phosphoglyceric acid on aerobic glycolysis and of the formation of α -glycerophosphate. Co 8-09337.

Gross, W. J. (1961)

MF
8-09202

Biol. Bull., Woods Hole, 121 (2) : 290-301

Osmotic tolerance and regulation in crabs from a hypersaline lagoon

CR 61-12815. Investigation concerned with ionic and osmotic regulation in *Hemigrapsus* and *Pachygrapsus* collected from Los Penasquitos lagoon during the period when the lagoon remained isolated from the open sea.

Navaz, J. M. (1962)

MF
8-09203

Industr. pesq., Vigo, 36 (841/842) : 145

La explotación ostrícola de la Ria de Vigo (On oyster exploitation in the Ria de Vigo)

Short note discussing the possible causes of the disappearance of oysters in the Galician Sea.

Sanchez, M. & Y. Sanchez (1962)

MF
8-09204

Industr. pesq., Vigo, 36 (841/842) : 143

La ostra portuguesa en las Rías Gallegas (Portuguese oysters in the Rías Gallegas)

Brief information about the progressive disappearance of *Crassostrea angulata* in the last few years.

Reys, S. (1961)

MF
8-09205

Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 53-109

Recherches sur la systématique et la distribution des Ostracodes de la région de Marseille (Research on the systematics and distribution of the Ostracoda from the Marseille region)

List of spp. (including the description of some n. spp.) of different sand biotopes. Contains observations on the characteristics of the biotope and the ecology of the spp. including seasonal variations.

- Tomiyana, T., K. Kobayashi & K. Kawabe** (1962) MF
8-09206
Bull. Jap. Soc. sci. Fish., 28 (3) : 383-6

(The toxic effect of pentachlorophenolate, a herbicide, on fishery organisms in coastal waters. 2. The effect of PCP on *Conchoelalis*). *Ni En*

Experimental determination of the effect of PCP as evidenced by change in outer appearance, succino-dehydrogenase activity, and rate of ^{32}P uptake. Co 8-09461.

- Toriumi, M. & M. Kato** (1961) MF
8-09207
Bull. Mar. biol. Sta. Asamushi, 10 (4) : 231-6

Preliminary report on the micro-fauna and flora among the mosses come from the Ongul Islands.

Numbers of algae, Protozoa and other animals associated with different species of moss. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (286).

- Harrod, J. J. & R. E. Hall** (1962) MF
8-09208
Hydrobiologia, 20 (2) : 173-8

A method for determining the surface areas of various aquatic plants. *Fr*

- Vacelet, E.** (1961) MF
8-09209
Rec. Trav. Sta. mar. Endoume, (36), *Bull.* (22) : 13-9

Les Ciliés de la microfaune des sables mal calibres des environs de Marseille (Ciliata from the microfauna in sand of unusual mass properties)

- Spain. Instituto Nacional de Estadística** MF
8-09210
Estadist. industr. Ind. deriv. Pesca, Madr., 1960, 150 p.

Data on Spanish plants, manpower, fish products, raw materials.

- Lund, J. W. C.** (1962) MF
8-09211
Preslia, 34 (1/2) : 140-6

Unsolved problems in the classification of the non-motile Chrysophyceae with references to those in parallel groups

BAgr. 26 (11) 86539.

- Sarà, M.** (1961) MF
8-09212
Ann. Ist. Zool. Univ. Napoli, 12 (1) : 1-10

Osservazioni sulla composizione, ecologia e differenziamento della fauna di Poriferi di acqua salmastra (Observations on the composition, ecology and differentiation of the fauna of brackish water Porifera). *It En*

The features of the sponge fauna of the Mediterranean lagoons of Thau and Venice are compared with those of the Indian Chilka Lake. The habitus and spicular modifications of some species are discussed.

MF

8-09213

Genovese, S., C. Rigano & M. La Cava (1962)*Atti Soc. Pelor.*, 8 (1/2) : 101-14

Osservazioni sulla distribuzione verticale della flora batterica nello stagno salmastro di Faro (Observations on the vertical distribution of the bacterial flora in the waters of the brackish lake of Faro). *It En*

Exposes results of observations on the vertical distribution of aerobes, anaerobes and sulphate reducing bacteria in relation to the environmental conditions.

MF

8-09214

Loewus, M. W. & C. C. Delwiche (1963)*Plant Physiol.*, 38 : 371-4

Carbon monoxide production by algae

WPA 37 (3) 397. Discusses with respect to the brown alga, *Egrecia menzies*, and others, and the higher plants.

MF

8-09215

Duchâteau-Bosson, G. & M. Florkin (1961)*Comp. Biochem. Physiol.*, 3 : 245-9

Change in intracellular concentration of free amino acids as a factor of euryhalinity in the crayfish *Astacus astacus*

IABS 25 (3) 5636. *A. astacus* survives in 25% sea water and maintains the osmotic concentration of the blood at a higher level than that of diluted sea water. The degree of hydration and the K content of the abdominal muscle show only slight modification. The adaptation, which enables survival for up to 3 months, results from an increase of intracellular concentration, partly due to increase in free amino acids.

MF

8-09216

Kubo, T. (1959)*Sci. Rep. Hokkaido Salm. Hatch.*, (14) : 15-9

(A preliminary study of the effects of environmental factors upon the attainment of the smolt stage in juvenile masu salmon). *Ni En*

Examination of the effect of light, temperature and water depth on the osmoconcentration of the blood of metamorphosing fish.

M

8-09217

Chew, K. K. (1960)*Spec. sci. Rep. U.S. Fish Wildl. Serv., Fish.*, (365) : 27 p.

Study of food preference and rate of feeding of Japanese oyster drill *Ocenebra japonica* (Dunker)

Two 70-day experiments on drills presented with a variety of possible food lamellibranchs.

MF

8-09218

Boaden, P. J. S. (1963)*J. Mar. biol. Ass. U.K.*, 43 (1) : 79-96

The interstitial fauna of some north Wales beaches

Lists over 100 spp., mostly new records for Britain, found in the interstices of sand and shell gravel from north Wales beaches. The distribution of this fauna in relation to the substrate is discussed and species typical of fine-medium- and coarse-particled substrates are listed.

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- Wieser, W.** (1963) MF
8-09219
J. Mar. biol. Ass. U.K., 43 (1) : 97-112
Adaptations of two intertidal isopods. 2. Comparison between *Campeopea hirsuta* and *Naesa bidentata* (Sphaeromatidae)

- Agrawal, V. P.** (1963) MF
8-09220
J. Mar. biol. Ass. U.K., 43 (1) : 125-8
Studies on the physiology of digestion in *Corophium volutator*

- Boaden, P. J. S.** (1963) MF
8-09221
J. Mar. biol. Ass. U.K., 43 (1) : 239-50
Behaviour and distribution of the archiannelid *Trilobodrilus heideri*

- Johnson, D. S.** (1962) F
8-09222
Malay. Nat. J., 16 (3) : 126-44
Water-fleas

III. popular account of appearance, anatomy, reproduction and life-history, food and feeding habits, coloration and distribution. Key to Malayan spp.

- Rao, K. P.** (1962) F
8-09223
Science, 137 : 682-3
Physiology of acclimation to low temperature in poikilotherms

CA 57 (11) : 14304. It was found that K, Na, and Ca increase and Cl, Mg, and free amino acids decrease in cold acclimated fresh-water mussels.

- Nemer, M.** (1962) M
8-09224
Biochem. biophys. Res. Commun., 8 (6) : 511-5
Interrelation of messenger polyribonucleotides and ribosomes in the sea urchin egg during embryonic development

CA 57 (11) : 14307.

- Aubry, R.** (1961) F
8-09225
Arch. Anat. micr. Morph. exp., 50 Suppl. : 521-602
A study of hermaphroditism and of the pharmacodynamic action of vertebrate hormones in gastropods

CA 57 (12) : 15628.

- Salanki, J.** (1961) F
8-09226
Acta. biol. Acad. Sci. hung., 12 (2) : 99-106

Localization of the influence of potassium ions in connection with the regulation of the slow rhythm in the periodic activity of fresh water mussel

CA 57 (12) : 15631.

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Zacharova, D. (1962)

F
8-09227

Biologia, 17 : 201-7

The different effects of strychnine on single excitatory and inhibitory nerve fibers of crayfish

CA 57 (12) : 16532.

Jaeger, C. P. (1962)

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8-09228

Comp. Biochem. Physiol., 6 : 243-5

Physiology of Mollusca. 2. Action of serotonin and other amines on the heart of *Strophocheilos oblongus*

CA 57 (12) : 15632.

Barek, I. B. (1961)

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8-09229

Biol. Kozlemen., 9 : 163-6

Histochemical investigations of fresh water planaria

CA 57 (7) : 9015.

Pretzmann, G. (1961)

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8-09230

Mem. Inst. sci. Madagascar, (F), 4 : 161-5

Die Reptantia der Österreichischen Madagaskar—Expedition 1958 (Reptantia from the Austrian Madagascar Expedition, 1958)

List, with description (ill.) of *BOTTIA madagascariensis neticulata*, n. subsp. and erection of a new genus: *BOTTIA*.

Dayal, R. & R. N. Tandon (1962)

F
8-09231

Hydrobiologia, 20 (2) : 121-7

Ecological studies of some aquatic Phycomycetes

Elgmork, K. (1962)

F
8-09232

Hydrobiologia, 20 (2) : 167-72

A bottom sampler for soft mud

Kamat, N. D. (1962)

F
8-09233

Hydrobiologia, 20 (2) : 188-92

Two new species of *Chroococcidiopsis* from India

Ruzicka, J. (1962)

F
8-09234

Preslia, 34 (1/2) : 176-89

(*Closterium limneticum* Lemm. 1899). *De*

BAgr. 26 (11) 86543.

BENTHOS

- Aliev, D. A.** (1962) F
8-09235
Nauch. Dokl. vyssh. Shk. (biol.), 1962 (2) : 134-6
(Overgrowing of small Kyzyl-Agach Bay). *Ru*
BAgr. 26 (11) 87137.
- Dulepova, B. I.** (1962) F
8-09236
Bot. Zh., 47 (7) : 1040-5
(Vegetation of Lake Tsvetkovskoye in the delta of the Selenga River). *Ru*
BAgr. 26 (11) 87160.
- Burch, J. B.** (1964)* F
8-09237
Occ. Pap. Mus. Zool. Univ. Mich., (637) : 7 p.
A new species of freshwater limpet, genus *Gundlachia*, from Japan
- Lefevre, M.** (1961) F
8-09238
Explor. Parc nat. Albert., 11 : 89-94
(Observations on the microflora and the microfauna of the lakes of Ruwen-
zori and of Visoke). *Fr*
BAgr. 26 (11) 87189.
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8-09239
R.C. Ist. lombardo, (B), 93 (1) : 47-9
La costante di sedimentazione dell'actina di gambero (The sedimentation
constant of actin extracted from crayfish). *It En*
The sedimentation constant of the *Potamobius fluviatilis* actin, is of 2.62.5.
- Gerzeli, G.** (1960) 8-09240
R.C. Ist. lombardo, (B), 94 (2) : 195-204
Ricerche istochimiche sulla ovogenesi nei Policladi (Hystochemical
researches of the ovogenesis in polyclads). *It*
Studies made on *Thysanozoon brocchi* Grube and *Pseudoceros velutinus*
Lareg.
- Gerzeli, G.** (1960) 8-09241
R.C. Ist. lombardo, (B), 94 (2) : 218
Ricerche citometriche sugli ovociti di *Thysanozoon brocchi* Grube (Cyto-
metrical researches on the oocytes of *Thysanozoon brocchi* Grube). *It En*
- Meier-Brook** (1963) F
8-09242
Arch. Hydrobiol. Suppl., 28 (5) : 2-46
Über die Mollusken der Hochschwarzwald und Hochvogesengewässer
(On the mollusks from the waters of the High Black Forest and the High
Vosges)

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Kajak, Z. (1961)

F
8-09243

Ekol. polsk. (A), 9 (20) : 344-53

Bentos profundalny jezior Tajty i Grajewko (Profundal benthic fauna in lakes Tajty and Grajewko). *Pl* En

A study to trace variations in its abundance over a period of years and to correlate it with environmental factors.

Pieczynska, E. (1961)

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8-09244

Ekol. polsk. (A), 9 (18) : 299-316

Badania nad zasięgiem przestrzennym zgrupowań nicieni (Nematoda) perifitonowych i czynnikami regulującymi ich występowanie (Investigation of the scope of groupings of periphyton Nematoda and the factors regulating their occurrence). *Pl* En

Based on material from lakes and a river in Poland.

Pieczynski, E. (1961)

F
8-09245

Ekol. polsk., (A), 9 (13) : 219-28

Numbers, sex ratio, and fecundity of several species of water mites (Hydracarina) of Mikołajskie Lake. *Pl*

Nelson, D. J. (1962)*

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8-09246

ORNL-TM-270 : 20 p.

Strontium, strontium-90, and calcium analyses of Clinch and Tennessee River clams

Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

Anon. (1962)*

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8-09247

TID-14831 : 4 p.

Effects of radium on stream algae and fish blood

Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

Oborn, E. & J. D. Hem (1962)*

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8-09248

Washington, GPO : 20 p.

Some effects of the large types of aquatic vegetation on iron content of water, chemistry of iron in natural water

Kamemoto, F. I. (1961)

F
8-09249

Comp. Biochem. Physiol., 3 : 297-303

The effects of eserine on sodium regulation in crayfish

IABS 25 (3) 5635. Concentration of Na in blood of *Orconectes virilis* is decreased from a mean value of 220 mequiv./l. to 196 mequiv./l. over a 24 hr. period after the injection of 20 μ g of 0.01 M eserine.

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- Leonard, J. W. & F. A. Leonard** (1962) F
8-09250
Michigan, Cranbrook Institute of Science, 139 p.
Mayflies of Michigan trout streams

Handbook on the identification and life-cycles of 75 spp. of trout to help fishermen, fishery biologists, and non-entomologists identify mayflies without resort to taxonomic keys.

- de Puytorac, F.** (1963) F
8-09251
C.R. Acad. Sci., Paris, 256 (7) : 1594-6

L'ultrastructure des cnidocytes de l'Actinomyxidie: *Sphaeractinomyxon amanieuvi* sp. nov. (The ultrastructure of the cnidocytes of the Actinomyxididae: *Sphaeractinomyxon amanieuvi* sp. nov.)

Preliminary note discussing the morphology and anatomy of a new sp. living in the body cavity of *Tubifex costatus*, from France.

- Hart, C. W.** (1960)* F
8-09252
Notul Nat. Acad. Philad., (335) : 4 p.

A new ostracod (Crustacea, Ostracoda) of the genus *Entocythere* from Pennsylvania

- Sinclair, R. M. & B. G. Isom** (1961)* F
8-09253
Tennessee. Stream Pollution Control Board, 31 p.

A preliminary report on the introduced Asiatic clam *Corbicula* in Tennessee

- Westhoff, V.** (1962) F
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Mimeo, 3 p.

Plant species characteristics of wetland habitats in the Netherlands

Do 61-452me.

FISHING

- Honda, K.** (1962) M
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Bull. Jap. Soc. sci. Fish., 28 (1) : 1-4
(Abrasion test of tuna long line). Ni En

- Kondo, K.** (1962) M
8-09256
Bull. Jap. Soc. sci. Fish., 28 (1) : 34-8
(Studies on relationships between amount and price of the marine fish catch from the Pacific coast of Honshu in 1958). Ni En

Seasonal fluctuations; correlation between price and amount of catch and discussion of this as evidence of stock size.

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Kubo, S. (1961)

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Mem. Fac. Fish. Hokkaido, 9 (1) : 56-83
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Reports isolation of two kinds of crystalline protein from the tropomyosin fraction in the mantle of *Ommastrephes sloani pacificus* and an examination of the solubility, amino acid composition, terminal residue and molecular size and shape of these proteins.

Phillips, J. G. et al. (1962)

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Endocrinology, 71 : 329-31
Corticosteroids in the blood of Atlantic hagfish
CA 57 (11) : 14300.

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Atti Soc. ital. Sci. vet., 14 : 469-73
(Determination of trimethylamine oxide in Adriatic fish). *It*
CA 57 (7) : 9015.

Mori, I. (1962)

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8-09260

Bull. Jap. Soc. sci. Fish., 28 (4) : 405-8
(Fishing ground by the purse-seine in the east China Sea). *Ni En*

Species composition, and size, of catch in relation with temperature and chlorinity.

Narasako, Y. (1961)

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Mem. Fac. Fish. Kagoshima, 10 : 96-101
(Experiments performed in a large circulating tank on a model of a fishing vessel of gross tonnage about 1000 tons). *Ni En*

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Bull. Jap. Soc. sci. Fish., 28 (9) : 924-9
Some physico-chemical properties of crystalline carbonic anhydrase from erythrocytes of ox, blue-white dolphin and yellowfin tuna

Electrophoretic behaviour and sedimentation and diffusion constants.

Shiokawa, T. (1962)

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Bull. Jap. Soc. sci. Fish., 28 (7) : 671-8
(Studies on the small coastal gill-net fisheries and their resources. 2. Characteristics of fishing grounds on the bottom gill-net fishery). *Ni En*

Species composition of catch on three grounds in the sea around Tomioka, Kumamoto Prefecture, and fishing rates. Co 8-09398.

FISHING

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Seasonal and secular changes in catch per unit effort and seasonal change in the frequency distribution of catch per unit effort; comparison of fishing power of nylon and cotton nets; composition of catch. Co 8-09263.

- Takahashi, K.** (1961) M
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 (On the building cost of 'Kagoshima Maru' fisheries training ship, Kagoshima University). *Ni En*

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Norsk Hvalfangst-tid., 48 (2) : 66-77
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Norsk Hvalfangst-tid., 48 (2) : 79-80
 The whale oil production 1958/59. *No*

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Norsk Hvalfangst-tid., 50 (9) : 355-79
 Whaling operations in the Antarctic in the season 1960/61. *No*

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Norsk Hvalfangst-tid., 52 (1) : 1-2
 Sperm oil reports 1962/63, pelagic operations. *No*

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Norsk Hvalfangst-tid., 52 (1) : 8-19
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 Catch reports. Pelagic catch in the season 1962/63. No

- Gunter, G.** (1962) M
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Publ. Inst. Mar. Sci. Univ. Tex., 8 : 216-26
 Shrimp landings and production of the state of Texas for the period 1956-1959, with a comparison with other Gulf States

Interpretive comments are made on trends, seasonal variations, and areal differences. Catch per hour was correlated with total production and was markedly seasonal.

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Bull. Fac. Fish. Hokkaido, 12 (4) : 253-64

Ichthyofauna of Oshoro Bay and adjacent waters

List of 75 spp. of 59 genera and 37 families, with notes on locality and frequency of occurrence.

AQUATIC STOCKS

- M
8-09372
- Kobayashi, K.** (1961)
Bull. Fac. Fish. Hokkaido, 12 (2) : 111-20
 (Larvae and young of the sand-launce, *Ammodytes hexapterus* Pallas from the North Pacific). Ni En

Body characteristics, vertebral count, length composition.

- M
8-09373
- Kobayashi, K. & M. Igarashi** (1961)
Bull. Fac. Fish. Hokkaido, 12 (2) : 121-7
 (Larvae and young of *Girella punctata* Gray from Hakodate Bay in southern Hokkaido). Ni En

Ill. morphological description.

- M
8-09374
- Kobayashi, K.** (1961)
Bull. Fac. Fish. Hokkaido, 12 (1) : 1-4
 (Young of the wolf-fish, *Anarhichas orientalis* Pallas). Ni En

Ill. morphological description of 2 specimens collected in the Okhotsk Sea.

- M
8-09375
- Kobayashi, K.** (1961)
Bull. Fac. Fish. Hokkaido, 12 (1) : 5-8
 (Larvae and young of the quill-fish, *Ptilichthys goodei* Bean, from the Okhotsk Sea). Ni En

Ill. morphological description.

- M
8-09376
- Kojima, S.** (1962)
Bull. Jap. Soc. sci. Fish., 28 (1) : 17-25
 (On the movements of the mackerel, *Scomber japonicus* Houttuyn, tagged in the neighboring waters of Oki Islands). Ni En

Tabulation of numbers tagged and of those recovered; indications of movements; surface currents at time of tagging and comparison of tagged-fish movements with those of drift bottles.

- M
8-09377
- Kubo, I.** (1961)
Bull. Jap. Soc. sci. Fish., 27 (12) : 1063-5
 (Stomach volume of Japanese spiny lobster, *Panulirus japonicus*). Ni En

Measurement by gravimetric method using emery; relations between this volume and body length and weight.

Kubo, I. (1962)M
8-09378*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 322-5(On the bimodality found in the catch of Japanese spiny lobster, *Panulirus japonicus*). Ni En

Nocturnal foraging leads to strong differences in catch rate between hours of the day.

Kuroki, T. & K. Kumanda (1961)M
8-09379*Bull. Fac. Fish. Hokkaido*, 12 (1) : 16-31

(The effects of underwater explosions for the purpose of killing predacious fishes). Ni En

Measurement of underwater pressure and recording of underwater sound, with record of types of injury caused related to distance of fish from site of explosion. The work was carried out as a part of an operation to clear a cove of fish fauna preparatory to developing culture (growing) of *Seriola quinqueradiata*.**Kusuda, R.** (1962)M
8-09380*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 551-2(Symposium on the culture of fish in sea-water. 3. Culture of the aye, *Plecoglossus altivelis* in sea-water pond).. Ni**Holme, T.** (1964)M
8-09381*Fiskeridir. Skr. Fisk.*, 5 (1) : 80 p.

Japansk bonito- og tunafiske (Japanese bonito and tuna fish). En

Lane, J. P. (1964)*MF
8-09382*Food Tech., Champaign*, 18 (7) : 156

Time-temperature tolerance of frozen seafoods. 1. Review of some of the recent literature on the storage life of frozen fishery products

Petrenko, I. N. & A. A. Karasikova (1960)M
8-09383*Trud. vsesoiuz. nauch.-issled. Inst. morsk. ryb. Khoz.*, 42 : 189-94

The use of the characteristics of the amino acid complex of the sprat in making short-term forecasts of its catch

CA 57 (12) : 15624.

Ianulov, K. P. (1962)M
8-09384*Dokl. Akad. Nauk SSR*, 144 : 1196-9Mochekamennaiia bolezn'u morskikh okunej *Sebastes marinus* L. i *Sebastes mentella* Travin (Urinary lithiasis in *Sebastes marinus* L. and *Sebastes mentella* Travin)

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Ivanov, A. S. (1962) M
8-09385
Ryb. Khoz., 38 (4) : 82-3
 (Truaptase activity of the anchovy-like sprat at low temperature). *Ru*

CA 57 (10) : 13027.

Schwartz, A. et al. (1961) M
8-09386
Stud. Univ. Babes-Bolyai, 2 (2) : 282-4

Adrenocorticotropin content of the hypophysis of some fish of the Black Sea

CA 57 (10) : 13027. The quantity of adrenocorticotropin in the hypophysis of fish varied according to species. The highest quantity was found in *Gobius melanostomus* and the smallest in *Trachurus trachurus*.

Precup, O. (1960) M
8-09387
Stud. Univ. Babes-Bolyai, 2 (2) : 225-30

Excretions of fish. 5. Excretion of *Gobius melanostomus* of the Black Sea

CA 57 (10) : 13034. CR 8-09388.

Precup, O. (1960) M
8-09388
Stud. Univ. Babes-Bolyai, 2 (2) : 253-62

Excretions of fish. 6. Nitrogen excretion and resistance to autointoxication by nitrogen products of fish of the Black Sea

Co 8-09387. CA 57 (10) : 13034.

Malvin, R. L. & I. B. Fritz (1962) M
8-09389
J. cell. comp. Physiol., 59 : 111-5

Renal transport of urea and some carbohydrates in *Lophius piscatorius*

CA 57 (7) : 9022.

Pora, E. A., O. I. Precup & I. Oros (1961) MF
8-09390
Stud. Univ. Babes-Bolyai, 2 (2) : 235-56

Penetration and elimination of radio-phosphorus in some marine and freshwater fish

CA 57 (9) : 11682.

Mito, S. (1962) M
8-09391
Bull. Jap. Soc. sci. Fish., 28 (5) : 499-503

(On the egg development and early larvae of a trachinoid fish, *Champsodon snyderi* Franz.). *Ni En*

Ill. description.

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Nakahara, K. (1962)

M
8-09392

Bull. Jap. Soc. sci. Fish., 28 (5) : 484-8

(A note on the larvae of *Antigonia capros* Lowe and *Erythrocles schlegeli* (Richardson) collected off the southern coast of Kyushu). Ni En

Ill. description, and list of differences between *A. capros* larvae and those of *A. rubescens*.

Oka, M. (1962)

M
8-09393

Bull. Jap. Soc. sci. Fish., 28 (5) : 477-83

(Studies on the estimation of the stock capacity of gyosho). Ni En

The gyosho is a kind of artificial reef intended to increase the stock of fish at a particular site. Estimation of capacity involves reference to relation between yield and fishing effort.

Shigeno, K. (1962)

M
8-09394

Bull. Jap. Soc. sci. Fish., 28 (5) : 548-9

(Symposium on the culture of fish in sea-water. 1. Problems on the collection of fry and seedling from natural bodies of water). Ni

Barlow, G. W. (1961)

M
8-09395

Biol. Bull., Woods Hole, 121 (2) : 209-29

Intra- and interspecific differences in rate of oxygen consumption in gobiid fishes of the genus *Gillichthys*

Reports results of a study on vergence between widely separated populations of *Gillichthys mirabilis* Cooper; comprises results of physiological and morphological findings.

Carton, Y. (1963)

M
8-09396

C.R. Acad. Sci., Paris, 256 (5) : 1148-50

Étude de la spécificité parasitaire chez *Lichomolgus actiniae* D.V. (Copépode Cyclopoïde) (Study on the parasitic specificity in *Lichomolgus actiniae* D.V. (Copepoda Cyclopidae))

Contamination experiments on *Anemonia sulcata* and *Actinia equina* from Roscoff and Banyuls showing marked physiological differences.

Gunter, G., L. L. Sulya & B. E. Box (1961)

M
8-09397

Biol. Bull., Woods Hole, 121 (2) : 302-6

Some evolutionary patterns in fishes' blood

Reports results of a study made, by electrophoretic techniques, of the plasma proteins of 26 species of elasmobranch and teleostome fishes from the northern gulf of Mexico. A general increase was found in the amount of plasma proteins from lower to more specialized fishes. There was a gradual increase in the number of globulin fractions of the plasma, from lower to higher fishes, among the orders of fishes, which did not always hold true at species levels.

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- Shiokawa, T. (1962)** M
8-09398
Bull. Jap. Soc. sci. Fish., 28 (6) : 574-8
 (Studies on the small coastal gill-net fisheries and their resources. 1. On the flying-fish drift gill-net fishery). *Ni En*

Examination of catch data, catch per unit effort, size examination of catch and seasonal changes of gonad index, to assess abundance of the stocks, selectivity of the method, and dependence of catch and fishing season on intensity and timing of spawning migration.

- Shiokawa, T. (1962)** M
8-09399
Bull. Jap. Soc. sci. Fish., 28 (9) : 884-90
 (Studies on the small coastal gill-net fisheries and their resources. 4. Fish population caught by the bottom gill-net). *Ni En*

Length composition of catch of 6 spp.; relation of average catch per net with its coefficient of variation for various spp.; seasonal variation of catching rate related to spawning and feeding. Co 8-09264.

- Taguchi, K. (1961)** M
8-09400
Bull. Jap. Soc. sci. Fish., 27 (11) : 963-71
 (A trial to estimate the instantaneous rate of natural mortality of adult salmon (*Oncorhynchus* sp.) and the consideration of rationality of offshore fishing. 1. For chum salmon (*Oncorhynchus keta*) 1961). *Ni En*

Attempt to estimate the difference between the increase in weight by growth and the decrease in weight by natural mortality during migration from off-shore to the coast; work based on tagging results which permit estimate of mortality rates and of recruitment strength.

- Tanoue, T. (1962)** M
8-09401
Bull. Jap. Soc. sci. Fish., 28 (9) : 847-50
 (Tentative studies on the live-bait. 1. On the swimming pattern and live-bait-efficacy in hooked horse-mackerel, *Trachurus japonicus*). *Ni En*

Horse mackerel were hooked at different parts of the body and allowed to swim on the end of the line; their swimming behaviour and their mortality over a six-hour period (at the end of which all had died) were recorded.

- Tanoue, T. (1961)** M
8-09402
Mem. Fac. Fish. Kagoshima, 10 : 90-5
 (On the relation between body-temperature of mackerel gomasaba and its fishing depth). *Ni En*

Measurements of body temperature immediately after being caught by long-line and comparison with body temperature after being held in water tank on board, to assess value of body temperature at capture as indicator of depth at which caught.

Tanoue, T. (1961)

M
8-09403

Bull. Jap. Soc. sci. Fish., 27 (12) : 1041-6

(Studies on the relationships between the drifting distribution of mackerel larvae, *Pneumatophorus tapeinocephalus* Bleeker, and the environmental factors. 2. On the larvae and the sea conditions in the surface and the middle-layers around the Osumi Islands). *Ni En*

Size of larvae, rates of collection at various depths and temperatures.
Co 61-01909.

Yasuda, H. & S. Ito (1962)

M
8-09404

Bull. Jap. Soc. sci. Fish., 28 (6) : 570-3

(Granographical life record curve method for identifying each stock of pelagic fishes. 1. Identification of sardine stocks in the Japan Sea.) *Ni En*

Plot, against back-calculated body-length from scale reading, of percentage of fish (in each sample) having a ring within each calculated length interval and designation of 'scale-types' from the result.

Tortonese, E. (1959)

M
8-09405

Ann. Mus. Stor. nat. Genova, 71 : 57-82

Revisione dei Centrolophidae (Pisces, Perciformes) del mar Ligure (Revision of the Centrolophidae (Pisces, Perciformes) from the Ligurian Sea). *It En*

Description of *Cubiceps gracilis*, *Centrolophus niger*, *Schedophilus medusophagus* and *S. ovalis*, the four species known from the Ligurian Sea.

Tortonese, E. (1959)

M
8-09406

Ann. Mus. Stor. nat. Genova, 71 : 226-32

Un nuove pesce mediterraneo di profondità, *EUTELICHTHYS leptochirus* n. gen. and n. sp. (fam. Eutelichthyidae nov.) (A new Mediterranean deep-sea fish, *EUTELICHTHYS leptochirus* n. gen. n. sp., fam. Eutelichthyidae nov.). *It En*

Description of this new species from two small specimens taken at 500 m. depth off Algeria.

Tortonese, E. (1959)

M
8-09407

Ann. Mus. Stor. nat. Genova, 71 : 233-47

Contributo allo studio degli Ophichthidae del Mediterraneo (Pisces: Anguilliformes) (Contribution to the study of the Ophichthidae of the Mediterranean Sea (Pisces: Anguilliformes)). *It En*

Description of the six Mediterranean species, one of which, *Pisodonophis semicinctus*, is hitherto known only from the coasts of Algeria.

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Carnaud, J. (1962) M
8-09408
Bull. Inst. océanogr. Monaco, (1248) : 83

Monographie de l'*Apogon* méditerranéen, *Apogon imberbis* (Linné) 1758
(Monography on the red *Apogon* from the Mediterranean *Apogon imberbis*
(Linné) 1758)

Chapters on systematics, external morphology, habitat and geographical
distribution, growth, sex-ratio, nuptial behaviour, internal fertilization,
spawning, breeding, embryonic development, larvae.

Mironova, N. V. (U.K. MAFF Transl.) (1962) M
8-09409
Lowestoft, Fish. Lab., mimeo, 19 p.

The distribution of cod

En 60-5784. Assessment of distribution in waters of Murman coast
from 1953 to 1955 based on trawling returns for coastal fishing vessels and for
trawlers of Murmansk fishing fleet operating in the coastal fishery squares.
Data on absence of cod in any particular area obtained from returns for a
small number of sweeps by expedition ship 'Diana'. Information on tem-
perature conditions in coastal waters is taken from data provided by the
Hydrological Laboratory and from an article by O. F. Kondratsova.

Maldacea, L. & E. Rocca (1959) M
8-09410
R.C. Ist. lombardo, (B), 93 (1) : 50-4

Ricerche sull'actinà della muscolatura della torpedine (Researches on the
actin from the muscles of the electric-ray). *It En*

G-actin was extracted from the muscles of the tail of *Torpedo ocellata* and
T. marmorata.

Matta, F. (1962) M
8-09411
Boll. Pesca Piscic. Idrobiol., 16 (1) : 95-143

Rilevamenti ittologici e tecnici nell'Atlantico nord-occidentale (Ichthyo-
logical and technical observations in the north-west Atlantic ocean). *It*
Fr En

Observations on gadoid fishes and *Sebastes* sp. and description of the
fishing grounds and the working systems on board of the trawler 'Genepesca
I'.

Torchio, M. (1962) M
8-09412
Boll. Pesca Piscic. Idrobiol., 16 (1) : 144-51

Osservazioni intorno alla probabile stenotermia del *Nemichthys scolopaceus*
Rich. in Mediterraneo (Pisces Anguilliformes) (Observation on the probable
stenotermity of *Nemichthys scolopaceus* Rich. (Pisces Anguilliformes) in the
Mediterranean Sea)

Concludes that this species should be considered a stenothermic species
performing real bathymetric migrations whose limit is a thermic layer ranging
from 13° to 15°C.

- M
8-09413
- Torchio, M.** (1962)
Boll. Pesca Piscic. Idrobiol., 16 (1) : 152-5
 I Soleidae del mar Ligure (Pisces Pleuronectiformes) (The Soleidae (Pisces Pleuronectiformes) of the Ligurian Sea). *It Fr En*

Eight species are listed and provisional notices are given on the frequency and bathymetrical distribution in the Ligurian Sea.

- M
8-09414
- Chittleborough, R. G.** (1959)
Norsk Hvalfangst-tid., 48 (2) : 47-55
 Australian marking of humpback whales. *No*

Summarizes up to 1958 the results of marking *Megaptera nodosa* off the Australian coast.

- M
8-09415
- Ruud, J. T. & P. Øynes** (1959)
Norsk Hvalfangst-tid., 48 (2) : 56-61
 Whale marking carried out by Norwegian catchers in the Antarctic, seasons 1956/57 and 1957/58. *No*

- M
8-09416
- Chittleborough, R. G.** (1959)
Norsk Hvalfangst-tid., 48 (2) : 62-6
Balaenoptera brydei Olsen on the west coast of Australia. *No*

- M
8-09417
- Percier, A.** (1959)
Rev. Trav. Inst. Pêches marit., 23 (2) : 161-76
 Les activités du bateau-pilote-de-pêche 'Donibane' (The activities of the scouting boat 'Donibane')

Results of scouting observations of sardines, anchovies and bluefin tunas.

- M
8-09418
- Angelin, J. & C. Nedelec** (1959)
Rev. Trav. Inst. Pêches marit., 23 (2) : 177-202
 Marquage de harengs en Mer du Nord et en Manche orientale (Campagne du 'Président-Théodore-Tissier', novembre 1957 (Herring tagging in the North Sea and oriental English Channel—Cruise of the 'Président-Théodore-Tissier', November 1957)

Describes tags and tagging operation and gives recoveries.

- M
8-09419
- Rossignol, M.** (1959)
Rev. Trav. Inst. Pêches marit., 23 (2) : 211-24
 Contribution à l'étude biologique des sardinelles. Étude de la variabilité d'un caractère méristique: le nombre de branchiospines (Contribution to the biological study of *Sardinella*. Study of the variability of a meristic character: the number of gill-rakers)

Study of the variability of gill rakers in *Sardinella aurita*, *S. eba* of West Africa and comparisons with *S. cameronensis* and *S. aurita* var. *mediterranea*.

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- Craig, W. L. & R. H. Haneday** (1962) M
8-09420
Calif. Fish Game, 48 (3) : 179-98
 The 1960 preseason albacore survey in the northeastern Pacific Ocean

Describes a survey, 23 May to 18 Jun. 1960 of an area bounded roughly by lat 30° to 38° N, and long. 134° W and the Channel Islands off California prior to the regular fishing season for *Thunnus germon* including exploratory fishing and collection of oceanographical data.

- Smith, A. C.** (1962) M
8-09421
Calif. Fish Game, 48 (3) : 199-201

The electrophoretic characteristics of albacore, bluefin tuna, and kelp bass eye lens proteins

First known report of such studies on fish eye lens proteins. Characteristics of *Thunnus germon*, *T. saliens* and *Paralabrax clathratus*.

- Carlisle, J. C., Jr.** (1962) M
8-09422
Calif. Fish Game, 48 (3) : 209

An unusual catch of a large number of Pacific round herring off Long Beach, California

Fourth record of *Etrumeus accuminatus* from California waters, 9 Nov. 1961, off Long Beach.

- Frey, H. W.** (1962) M
8-09423
Calif. Fish Game, 48 (3) : 210-1

A range extension for the Mexican scad to Monterey Bay, California

Describes capture of *Decapterus pinnulatus* in Jul. 1961 increasing known northern range.

- Berner, M.** (1961) M
8-09424
Z. Fisch., 10 (7) : 481-602

Untersuchungen über den Dorschbestand (*Gadus morhua* L.) der Bornholm- und Arkonasee in den Jahren 1953-1955 (Investigations on the amount of cod, *Gadus morhua* L., in the sea off Bornholm and Arkona in the years 1953-1955. Yearly and maturity cycle). En Ru

Points out the manifold relationships between spawning biology and the seasonal course of practical fishery; demonstrates that fishing grounds, yield, size and age composition of fish are conditioned throughout the year by the spawning cycle. Tables, bibliography.

- Leccia, F. M.** (1961) M
8-09425
Bol. Inst. oceanogr. Univ. Oriente, 1 (2) : 396-473

Osteologia comparada en ocho especies de Pomadasydæ (Pisces-Perciformes) del golfo de Cariaco, Venezuela, y areas adyacentes (Comparative osteology of eight species of Pomadasydæ (Pisces Perciformes) from the gulf of Cariaco, Venezuela, and adjacent areas). En

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Radovich, J. (1962)

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8-09426

Calif. Fish Game, 48 (2) : 123-40

Effects of sardine spawning stock size and environment on year-class production

Develops a population model for *Sardinops caerulea* which is also fitted by other species, and discusses possibility of the collapse of a genetically distinct subpopulation of this *Sardinops*.

Veillet, A. (1963)

M
8-09427

C.R. Acad. Sci., Paris, 256 (7) : 1609-10

Métamorphose de la cypris ♀ du rhizocéphale *Drepanorchis neglecta* Frayse (Metamorphose of the cypris ♀ of the rhizocephale *Drepanorchis neglecta* Frayse)

Preliminary note reporting observations on the larval development of individuals parasites of *Macropodia rostrata* from Roscoff area.

Martin, F. I. (1960)*

M
8-09428

Philadelphia, Chilton Co., Book Division, 201 p.

Sea bears; the story of the fur seal

McAllister, D. E. (1960)*

M
8-09429

Nat. Hist. Pap., (5) : 21 p.

Keys to the marine fishes of arctic Canada

Rubinfoff, I. & E. Shaw (1960)*

M
8-09430

Amer. Mus. Novit., (1999) : 13 p.

Hybridization in two sympatric species of atherinid fishes, *Menidia menidia* (Linnaeus) and *Menidia beryllina* (Cope)

USFWS. Bureau of Commercial Fisheries (1960)*

M
8-09431

Rep. biol. Lab. Woods Hole, (60-1)

Summary of tagging operations Jul. 1959-Jun. 1960

Webb, R. G. (1960)*

M
8-09432

Breviora, (129) : 8 p.

Type and type locality of the Gulf Coast spiny softshell turtle, *Trionyx spinifer asper* (Agassiz)

Clemens, W. A. & G. V. Wilby (1961)*

M
8-09433

Bull. Fish. Res. Bd Can., (68) : 443 p.

Fishes of the Pacific coast of Canada

U.S. Bureau of Commercial Fisheries (1961)*

M
8-09434

Seattle, Marine Mammal Biological Laboratory

Pelagic fur seal investigations

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U.S. Bureau of Commercial Fisheries. Pacific Region (1961)* M
8-09435
Seattle, 10 p.

Fur seal investigations. Pelagic investigations. Plans of operations—May to October 1962 and Pribilof Islands fur seal investigations

Marvin, K. T. & L. M. Lansford (1962) M
8-09436
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 143-6
Phosphorus content of some fishes and shrimp in the Gulf of Mexico

The total phosphorus composition was determined for ten species of fish and *Penaeus setiferus* found in the coastal and bay waters of Galveston, Texas. The results of the analyses, which were based on the entire animal, were compared with the few similar analyses that have been made on other marine species.

Breuer, J. P. (1962) M
8-09437
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 153-83
An ecological survey of the lower Laguna Madre of Texas, 1953-1959

Hydrographic data and annotated comments on the distribution and habits of species are presented. Some ecological effects of man-made changes and movements of year classes of game fishes are described.

Simmons, E. G. & J. P. Breuer (1962) M
8-09438
Publ. Inst. Mar. Sci. Univ. Tex., 8 : 184-211
A study of redfish, *Sciaenops ocellata* Linnaeus and black drum, *Pogonias cromis* Linnaeus

Information on distribution, life history, parasites, sport and commercial fishery of the spp. in the Gulf of Mexico from 1949 to 1959.

Thompson, J. R. & S. Pringer (1961)* M
8-09439
Circ. U.S. Fish Wildl. Serv., (119) : 19 p.
Sharks, skates, rays, and chimaeras

Wheeler, J. F. G. (1961) M
8-09440
Fish. Publ. Lond., (15) : 199 p.
The genus *Lethrinus* in the western Indian Ocean

A clear up of the taxonomy of *Lethrinus* with special reference to the fishes in their *post mortem* colours and markings of the local markets on and off the East African coast.

Brown, S. G. (1962) M
8-09441
Norsk Hvalfangst-tid., 51 (11) : 429-34
Whale marks recovered during Antarctic seasons 1960/61, 1961/62, and in South Africa 1962. No

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Oregon. State Game Commission. Information-Education Division (1961)*

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8-09442

Ore. St. Game Comm. Bull., (14) : 4 p.
Rock, surf and bay fishes of Oregon

Cogswell, S. L. (1959)*

M
8-09443

Woods Hole, Fisheries Biological Laboratory, 15 p.
Summary of tagging operations, January 1958 through June 1959

Bone, Q. (1963)

M
8-09444

J. Mar. biol. Ass. U.K., 43 (1) : 31-47

Some observations upon the peripheral nervous system of the hagfish,
Myxine glutinosa L.

Observations are described upon the innervation of striated muscles, the innervation of the slime glands, and the subcutaneous innervation.

Denton, E. J. & T. I. Shaw (1963)

M
8-09445

J. Mar. biol. Ass. U.K., 43 (1) : 65-74

The visual pigments of some deep-sea elasmobranchs

A study of the retinae of three species of deep-sea shark, *Centrophorus squamosus*, *Centroscymnus coelolepis* and *Deania calcea*. The retina of the hake (*Merluccius merluccius*) was studied for comparison. Some observations on the retinae of the moray eel (*Muraena helena*) and the Atlantic salmon (*Salmo salar*) are also described.

Bagenal, T. B. (1963)

M
8-09446

J. Mar. biol. Ass. U.K., 43 (1) : 177-9

The fecundity of plaice from the bay of Biscay

Pleuronectes platessa L.

Bagenal, T. B. (1963)

M
8-09447

J. Mar. biol. Ass. U.K., 43 (1) : 221-3

The fecundity of Icelandic plaice

One of a series of papers on the fecundity of *Pleuronectes platessa* L. over a wide area of its geographical distribution.

Hashimoto, K. & F. Matsuura (1962)

MF
8-09448

Bull. Jap. Soc. sci. Fish., 28 (9) : 914-9

Comparative studies on two hemoglobins of salmon. 4. N-terminal amino acid

Identification of N-terminal residues and determination of their number.

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- Inaba, D. & R. Uehara** (1962) MF 8-09449
Bull. Jap. Soc. sci. Fish., 28 (7) : 679-85
 (On the types and roles played by the resting pool of eel-pond). Ni En

Depth and surface area of ponds; types of water circulation, temperature and O_2 .

- Kubo, T.** (1961) MF 8-09450
Bull. Fac. Fish. Hokkaido, 12 (3) : 189-95
 (Notes on the blood of masu salmon (*Onchorhynchus masou*) during up-stream migration for spawning, with special reference to the osmoconcentration). Ni En

Changes in freezing point, chloride content, density and water content.

- Tiwari, R. D. & K. C. Srivastava** (1962) MF 8-09451
Proc. nat. Acad. Sci., India, (A) 32, Pt 2 : 111-8
 Component acid from the visceral fat of the fish *Labeo rohita* with different stages of growth

CA 57 (11) : 14301.

- Fingerman, M. & T. Aoto** (1962) MF 8-09452
Gen. Compt. Endocrin., Suppl. 1 : 81-93
 Hormonal regulation of pigmentary effectors in crustaceans

CA 57 (12) : 15626.

- Jonas, R. E. E., H. S. Sehdev & N. Tomlinson** (1962) MF 8-09453
J. Fish. Res. Bd Can., 19 : 619-24
 Blood pH and mortality in rainbow trout (*Salmo gairdnerii*) and sockeye salmon (*Oncorhynchus nerka*)

CA 57 (10) : 13029.

- Steffens, W.** (1962) MF 8-09454
Naturwissenschaften, 49 : 109-10
 (The determination of hemoglobin in fish). De

CA 57 (2) : 2687. Mammalian red cells contain nuclei only in the embryonic form whereas those of fish contain them at all times.

Nose, Y. (1961)MF
8-09455*Bull. Jap. Soc. sci. Fish.*, 27 (10) : 881-92(On the Petersen-type estimate of fish population under the existence of recruitment). *Ni* En

Mathematical examination (with bead-drawing trials) of the effect of recruitment (1. at constant rate relative to population, 2. at constant amount) on estimates of population size. Proposals for removal of bias in the estimates.

Nose, Y. (1962)MF
8-09456*Bull. Jap. Soc. sci. Fish.*, 28 (7) : 686-94(On the tagged ratio methods to remove the bias of estimate caused by type C systematic errors in the Petersen-type tagging experiments). *Ni*

Mathematical derivation of method to remove the bias and examples of calculations.

Șerpoianu, Gh., C. Mărgineanu & V. Chirilă (1961)MF
8-09457*Bul. Inst. Cerc. pisc.*, 20 (4) : 12-26

Consecințele condițiilor meteorologice, hidrologice și hidrobiologice ale anilor 1960-1961 asupra pescuitului marin românesc din cursul anului 1961 (Effects of meteorological, hydrological and hydrobiological conditions in the years 1960-1961 on the Roumanian marine fisheries in 1961). *Ro Ru Fr*

Discusses the interrelations observed in the Black Sea in relation to migration and availability of fish.

Suzuki, T. & M. Migita (1962)MF
8-09458*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 61-72(Post mortem change of fish myosins. 1. Some physicochemical changes with special reference to species and lethal conditions of fish). *Ni* En

Comparison, between fish killed instantaneously and fish killed after stress, of extractability, salting-out curves and viscometric behaviour.

Tomiya, T., K. Kobayashi & K. Kawabe (1962)MF
8-09459*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 417-21(The toxic effect of pentachlorophenolate, a herbicide, on fishery organisms in coastal waters. 3. The effect on *Venerupis philippinarum*). *Ni* En

Study of the toxic effect of PCP (which contaminates shallow coastal waters in drain-off from paddy-fields) by observing the rate of ^{32}P uptake and survival time on exposure to test solutions, renewed each day. *Co* 8-09206.

Tomiyama, T. et al. (1962) MF
8-09460
Bull. Jap. Soc. sci. Fish., 28 (4) : 422-5

(The toxic effect of pentachlorophenolate, a herbicide, on fishery organisms in coastal waters. 4. The effect on *Venerupis philippinarum* of PCP which was constantly supplied or absorbed on estuary mud). Ni En

Co 8-09459.

Tomiyana, T. & K. Kawabe (1962) MF
8-09461
Bull. Jap. Soc. sci. Fish., 28 (3) : 379-82

(The toxic effect of pentachlorophenolate, a herbicide, on fishery organisms in coastal waters. 1. The effect on certain fishes and shrimps). Ni En

Lethal concentrations for various organisms exposed to test solutions renewed each day; also level at which PCP could be detected by *Nibea albiflora*.

Yamamura, Y. (1962) MF
8-09462
Bull. Jap. Soc. sci. Fish., 28 (1) : 39-44

(Studies on the mechanism of consumption and accumulation of vitamin A in fish. Pt. 2). Ni En

Relates vitamin content (A) to body length in the formula

$$A = kl \sim 3[\ln(1/1-2) - \lambda - (\lambda^2/2) - (\lambda^3/3)]$$

in which $\lambda = 1/l \sim$ and k is a constant of which values are given for several kinds of fish; k is shown independent of ground, season and depth for a particular species. Co 61-00056.

Dulzetto, F. (1962) MF
8-09463
Atti Soc. Pelor., 8 (1/2) : 1-46

Le attuali conoscenze sulle acque salmastre della Sicilia e sulla loro fauna (Present knowledge of the Sicilian brackish waters and of their fauna). It

Describes the new species and varieties of *Engraulis* in the brackish lakes, and other fishes.

Chadwick, H. K. (1962) MF
8-09464
Calif. Fish Game, 48 (3) : 153-77

Catch records from the striped bass sportfishery in California

Catch records from a party boat fishery and postal card surveys are examined to determine the status of California's *Roccus saxatilis* population during the period 1949-1959. Supplements an earlier paper covering the party boat fishery for the period 1938-1948, and several papers reporting postal card survey results.

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- Lillelund, K. & W. Seemann** (1961) MF
Z. Fisch., 10 (7) : 603-58 8-09465
 Der Sehlendorfer Binnensee (1-6). Limnologische und fischereibiologische Untersuchung eines Strandgewässers an der deutschen Ostseeküste. 6. Die Fischerei im Sehlendorfer Binnensee (The Sehlendorfer inland lake. 1-6. Limnological and biological investigations of a brackish water lake on the Baltic coast. 6. Fisheries in the Sehlendorfer inland lake). En Ru
- Co 8-06114. This typical seashore lake represents an excellent feeding lake for many edible species of fishes. Data given for: *Pleuronectes flesus*, *Anguilla vulgaris*, *Perca fluviatilis*, *Abramis brama*, *Idus melanotus*, *Leuciscus rutilus*, *Salmo salar*, *Salmo trutta* and *Gobius*. Tables, bibliography.
- Wolter, R.** (1961) MF
Z. Fisch., 10 (7) : 763-9 8-09466
 Die *Vibrio-anguillarum*-Seuche im Strelasund und Greifswalder Bodden (The *vibrio-anguillarum* disease in the Strelasund and Greifswald Bodden). En Ru
- Slinn, D. J.** (1963) MF
Nature, Lond., 197 (4864) : 306 8-09467
 Occurrence of *Discocotyle sagittata* on sea trout
- MacKinnon, D., L. Edgeworth & R. E. McLaren** (1961) MF
Canad. Fish Cult., (30) : 3-14 8-09468
 An assessment of Jones Creek spawning channel, 1954-1961
- A description of a spawning channel for *Oncorhynchus* along with an assessment of its operation, maintenance and results during the seven years following construction in 1954.
- Todd, J. S. & K. J. Jackson** (1961) MF
Canad. Fish. Cult., (30) : 15-38 8-09469
 The effects on salmon of a program of forest insect control with DDT on northern Moreby Island
- Describes results of experiments prior to the main spray program and the program itself. Also describes effects of application of a fuel oil formulation of *Bacillus thuringiensis*.
- Dalziel, J. A. & K. G. Shillington** (1961) MF
Canad. Fish. Cult., (30) : 57-60 8-09470
 Development of a fast-growing strain of Atlantic salmon (*Salmo salar*)
- Describes development by selective breeding from late run Miramichi River stock.

AQUATIC STOCKS

Forrester, C. R. (1961)

MF
8-09471

Canad. Fish. Cult., (30) : 61-2

A note on the practical use of a salmon repellent

Describes the use of bear paws dipped in water to repel *Oncorhynchus gorbusha*.

Hamer, B. W. (1961)

MF
8-09472

Canad. Fish. Cult., (30) : 63-4

Design of fishways and other fish facilities

Re 62-01526.

Jubb, R. A. (1962)

MF
8-09473

Piscator, 16 (54) : 20-1

Freshwater eels, *Anguilla* spp. in Madagascar

Discusses presence of *Anguilla marmorata*, *A. bicolor bicolor* and *A. mossambica* and eel fisheries.

Markus, H. C. (1962)

MF
8-09474

Progr. Fish-Cult., 24 (3) : 127-30

Hatchery-reared Atlantic salmon smolts in ten months

Describes use of heated water to grow *Salmo salar* quickly and economically.

Novothy, A. J. & G. F. Esterberg (1962)

MF
8-09475

Progr. Fish-Cult., 24 (3) : 139-41

A 132-kilocycle sonic fish tag

Describes an improved sonic fish tag 0.8 x 1.8 inches in size and weighing 7 grams in water which can be tracked by sonar and which has been developed for Pacific salmon studies.

Hoffman, G. L. (1962)

MF
8-09476

Progr. Fish-Cult., 24 (3) : 143-4

Parasitology of fishes

Re 60-4187.

Darnell, R. M. (1962)

MF
8-09477

Publ. Inst. Mar. Sci. Univ. Tex., 8 : 299-365

Fishes of the Río Tamesí and related coastal lagoons in east-central Mexico

For each species information is given, if available, regarding the following: nomenclature, distribution, salinity relations, general ecology, food habits, and reproduction.

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MF

Kairov, E. A. & Z. I. Chudova (1961)

8-09478

Trud. latviisk. Otd. vsesoius. nauch.-issled. Inst. morsk. ryb. Khoz., 3 : 479-93

Propusk migriruiushchikh proizvoditelei lososia i syrti cherez rybodkhod Kegumskoi GES (The passage of migrating Atlantic salmon and vimba spawners through the fishway of the Kegum hydro-electric station)

Intensity of passage of fish upstream depends on actual discharge of water. Temperature also affected movement, as did time of day.

MF

Kairov, E. A. & Z. I. Chudova (1962)

8-09479

Transl. Ser. Fish. Res. Bd Can., (399) : 1 p.

The passage of migrating Atlantic salmon and vimba spawners through the fishway of Kegum hydro-electric station)

En 8-09478.

MF

Malikova, E. M., S. O. Apine & R. E. Shaldaeva (1961)

8-09480

Trud. latviisk. Otd. vsesoius. nauch.-issled. Inst. morsk. ryb. Khoz., 3 : 445-52

Ispolzovanie vitaminov v kachestve profilakticheskikh i lechebnykh sredstv pri zabolevaniakh molodi lososia na rybovodnykh savodakh (The use of vitamins as a prophylactic and medicinal measure for diseases of young salmon in hatcheries)

Treatment consists of feeding vitamin enriched foods to juvenile salmon to prevent infections with Ichthiophthiriasis and Trichodiniasis.

MF

Malikova, E. M., S. O. Apine & R. E. Shaldaeva (1962)

8-09481

Transl. Ser. Fish. Res. Bd Can., (398) : 1 p.

The use of vitamins as a prophylactic and medicinal measure for diseases of young salmon in hatcheries

En 8-09480.

MF

Malikova, E. M. & N. I. Kotova (1961)

8-09482

Trud. latviisk. Otd. vsesoius. nauch.-issled. Inst. morsk. ryb. Khoz., 3 : 431-43

Znachenie antibiotikov pri iskusstvennom vyrashchivanii molodi lososia (The value of antibiotics in artificial rearing of young salmon)

To intensify the growth of the salmon and to get the best results in size of the species, it is necessary to add to the food a complex of antibiotic food which contains even parts of penicillin, biomyein and furasolidon.

MF

Malikova, E. M. & N. I. Kotova (1962)

8-09483

Transl. Ser. Fish. Res. Bd Can., (397) : 1 p.

The value of antibiotics in artificial rearing of young salmon

En 8-09482.

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Pinsky, F. Ya. (1961)

MF

8-09484

Trud. latviisk. Otd. vsesoius. nauch-issled. Inst. morsk. ryb. Khoz., 3 : 495-503

O sutochnom ritme pitaniia segoletok lososia (*Salmo salar* L.) (The daily rhythm of feeding among fingerling salmon)

Salmon fingerlings feed more heavily in the morning hours (4-8 a.m.) than in the evening (4-8 p.m.). A difference was also found in type of food utilized in the morning and evening feeding periods.

MF

8-09485

Pinsky, F. Ya. (1962)

Transl. Ser. Fish. Res. Bd Can., (400) : 1 p.

The daily rhythm of feeding among fingerling salmon (*Salmo salar* L.)

En 8-09484.

MF

8-09486

Creutzberg, F. (1961)*

Neth. J. Mar. Res., 1 (3) : 257-338

On the orientation of migrating elvers (*Anguilla vulgaris* Turt.) in a tidal area

MF

8-09487

Lindroth, A. (1961)*

ICES, C.M. (6) : 31.

Salmon and porpoise in the Baltic; preliminary communication

MF

8-09488

Freeman, R. F. H. (1963)

J. Mar. biol. Ass. U.K., 43 (1) : 113-23

Experimental infection of two species of wrasse with the digenean *Proctoeces subtenuis*

Two spp. of wrasse, *Ctenolabrus rupestris* (L.) and *Crenilabrus melops* (L.) were experimentally infected with the digenean *Proctoeces subtenuis* (Linton) collected from *Scrobicularia plana* (da Costa); the experimental results are discussed.

F

8-09489

Honma, Y. (1961)

Bull. Jap. Soc. sci. Fish., 27 (10) : 873-80

Studies on the endocrine glands of the salmonoid fish ayu, *Plecoglossus altivelis* Temminck et Schlegel. 4. The fate of the unspawned eggs and the new crops of oocytes in the spent ovary

Cyto-histological examination of the spent ovaries of otu-nen ayu which have remained in the rivers after spawning.

F

8-09490

Igarashi, K. (1962)

Bull. Jap. Soc. sci. Fish., 28 (4) : 393-8

(Observation on the development of the scutes in ten-spined stickleback, *Pungitius sinensis* (Guichenot). Ni En

Ill. morphological description.

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- Ishida, R.** (1961) F
8-09491
Bull. Jap. Soc. sci. Fish., 27 (12) : 1052-7
 (On the spawning of the ayu, *Plecoglossus altivelis* T. & S. 2. Relationships between the size of spawners and the size of gravels of the spawning bed).
Ni En

Ci 8-09492.

- Ishida, R.** (1962) F
8-09492
Bull. Jap. Soc. sci. Fish., 28 (4) : 399-404
 (On the spawning of the ayu, *Plecoglossus altivelis* T. & S. 3. Relationships between the size of spawners and the depth of water of the spawning ground).
Ni En

Field observations and pond experiments on difference of spawning behaviour (depth of water, and size of bottom gravel selected) between size groups. Co 8-09491.

- Khanna, S. S.** (1961) F
8-09493
J. zool. Soc. India., 13 (2) : 206-19
 Alimentary canal in some teleostean fishes

Ill. description of the alimentary canal of 16 spp. of freshwater fishes.

- Matsui, Y.** (1962) F
8-09494
Bull. Jap. Soc. sci. Fish., 28 (5) : 497-8
 (On the rainbow trout (*Salmo gairdneri irideus*) in lake Titicaca, South America). *Ni En*

Brief description of the lake and presentation of an opinion with regard to the relation of this sp., as a land-locked form, with *Salmo gairdneri gairdneri*.

- Mulcahy, M. F. & F. J. O'Rourke** (1964) F
8-09495
Life Sci., 3 (7) : 719-21
 Lymphosarcoma in the pike *Esox lucius* L. in Ireland

- Sano, T.** (1960) F
8-09496
J. Tokyo Univ. Fish., 46 : 67-75
 Seasonal variation of blood constituents of rainbow trout

CA 57 (11) : 14302.

- Sano, T.** (1960) F
8-09497
J. Tokyo Univ. Fish., 46 : 77-87
 Change in blood constituent with growth of rainbow trout

CA 57 (11) : 14302. The levels of serum protein α - and β -globulins increased gradually with the growth of fingerling *Salmo gairdneri*.

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- Ergens, R.** (1962) F
8-09498
Progr. Fish Cult., 24 : 133-4
 Direct control measures for some ectoparasites of fish
 CA 57 (11) : 14308.

- Fleming, W. R., K. G. Scheffel & J. R. Linton** (1962) F
8-09499
Comp. Biochem. Physiol., 6 : 205-13
 The gill cholinesterase activity of several cyprinodontid fishes

CA 57 (12) : 15621. Comparative data are tabulated for the gill cholinesterase (I) activity and the salinities of the habitats of *Adinia xerica*, *Lucania parva*, *Fundulus grandis*, *F. similis*, *F. pulvereus*, *F. zebrinus*, *F. kansae*, *F. catenatus* and *F. notatus*.

- Lebedeva, G. D.** (1962) F
8-09500
Radiobiol., 2 (1) : 43-9
 Main pathways of Sr^{89} incorporation into the benthos-feeding fish living in fresh water
 CA 57 (12) : 15628.

- Baker-Cohen, K. F.** (1961) F
8-09501
Zoologica, N.Y., 46 : 181-222
 The role of the thyroid in the development of platyfish
 CA 57 (12) : 15630. Experiments carried out with *Sciphophorus maculatus*.

- Kim, K.-H. & T. T. Tchen** (1962) F
8-09502
Biochim. biophys. Acta, 59 : 569-76
 Tyrosinase of the goldfish, *Carassius auratus*. 1. Radio-assay and properties of the enzyme
 CA 57 (10) : 13023.

- Naito, K. & F. H. Wilt** (1962) F
8-09503
J. biol. Chem., 237 : 3060-4
 The conversion of vitamin A_1 to retinene₂ in a fresh-water fish

Used tritiated vitamin A injected into *Lepomis* hybrids to investigate sites and paths of chromophore synthesis.

- Bralić, V.** (1962) F
8-09504
Zesz. nauk. wyższ. Szk. roln. Olsztyn., 14 (4) : 479-84
 Rozwój rybactwa stawowego i wyniki badań nad intensyfikacją hodowli karpia w Jugosławii (The development of the fish culture and researches on intensification of the carp production in Yugoslavia)

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Stud. Univ. Babes-Bolyai, 2 (2) : 263-9

Excretion of fish. 7. Nitrogen excretion and minimum nonautotoxic volume of water for some fish, especially fresh-water fish

Co 8-09388. CA 57 (10) : 13034.

Bauer, K. (1961)

F
8-09506

Mitt. biol. Bundesanst. Berl., (105) : 72 p.

Toxicity of plant protectants to fish and their blood organisms

CA 57 (10) : 13035. A review of the effects of numerous Cl-containing and P-containing insecticides and herbicides.

Bueckmann, D. & J. H. Dustmann (1962)

F
8-09507

Naturwissenschaften, 49 : 379

(Morphological color variations of *Carassius morosus*). De

CA 57 (10) : 13036. Optical stimulation decisively influences the pigmentation of *C. morosus* since ommochrome synthesis is controlled in the eye.

Kaplan, H. M. (1960)

F
8-09508

Herpetologica, 16 : 202-6

Variation with age of the electrophoretic protein pattern in turtle blood

CA 57 (2) : 2687. Total serum proteins of baby *Pseudemys scripta elegans* is 1.57 g/100 ml as compared with 6.03 for adult turtles.

Krishna, D. (1961)

F
8-09509

Proc. nat. Acad. Sci., India (B), 31 (3) : 261-7

Histochemical studies of the lipids in the developing eggs of the common English trout (*Salmo trutta* and *S. irideus*). 4. Lipoproteins: their location and role

Co 62-06119. CA 57 (2) : 2693.

Jara, Z. (1961)

F
8-09510

Zool. Polon., 11 : 101-29

The mechanisms of thrombinogenesis in carp (*Cyprinus carpio*)

CA 57 (7) : 9018.

Bentley, P. J. (1962)

F
8-09511

Comp. Biochem. Physiol., 6 : 95-7

Permeability of the skin of the cyclostome *Lampetra fluviatilis* to water and electrolytes

CA 57 (7) : 9022. Skin from the lamprey was more permeable to H₂O than skin from teleosts but less permeable than that from frogs and toads.

- F
8-09512
- Nomura, M.** (1962)
Bull. Jap. Soc. sci. Fish., 28 (4) : 409-16
 (Studies on reproduction of rainbow trout, *Salmo gairdineri*, with special reference to egg taking. 1. Morphological changes of gonad in the process of maturation and the ovulation of eggs). *Ni En*
 Identification of stages, and their duration. Disposition of mature eggs in body cavity.
- F
8-09513
- Oguri, M.** (1961)
Bull. Jap. Soc. sci. Fish., 27 (12) : 1058-62
 Histo-morphology on the kidney and adrenal gland of medaka, *Oryzias latipes* (T. et S.)
- F
8-09514
- Omi, H.** (1962)
Bull. Fac. Fish. Hokkaido, 12 (4) : 247-52
 (Morphological changes of the preopercular spines with the advance of growth in two sculpines in Hokkaido). *Ni En*
 Degeneration of spines in *Cottus hangiongensis* but no change in *C. nosawae*.
- F
8-09515
- Ueno, M.** (1962)
Hydrobiologia, 20 (2) : 185-7
 A new suctorian parasitic to a Japanese bathynellid. *Fr*
- F
8-09516
- Teodorescu-Leonte, R. & M. Ion** (1961)
Bul. Inst. Cerc. pisc., 20 (4) : 27-36
 Observații asupra migrației peștilor efectuate în anul 1960 în unitatea experimentală stuficolă Rusca (Delta-Dunării) (Observations made in 1960 on fish migration at the pilot and reed-bed unit Rusca (in the Danube Delta)).
Ro Ru Fr
 Report on the use of draining channels and effects on carp migration.
- F
8-09517
- Dumitru, B.** (1961)
Bul. Inst. Cerc. pisc., 20 (4) : 37-42
 Păstrarea spermatozoizilor de crap în stare vie (Conservation *in vivo* of some carp spermatozoa). *Ro Ru Fr*
 Reviews Soviet and Chinese methods and discusses their application to Roumanian fishculture.

Sumuleanu, B. (1961)F
8-09518*Bul. Inst. Cerc. pisc.*, 20 (4) : 56-62

Piscicultura în apele interioare—iazuri și heleșteu—din regiunea București (Fishculture in the inland-waters—ponds—of the Bucarest region). Ro Ru Fr

Reviews present level of exploitation and analyses the prospectives of development.

Mirică, Gh. (1961)F
8-09519*Bul. Inst. Cerc. pisc.*, 20 (4) : 63-4

Din experiența piscicultorilor din Republica Populară Federativă Iugoslavia (Fishculture experiments in the People's Federal Republic of Yugoslavia). Ro Ru Fr

Short note based on a visit to the fishculture farm of Ečka.

Tamura, O., M. Yasuda & T. Fujiki (1962)F
8-09520*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 504-9

(Method for judging the physiological condition of fish by the quantitative changes of the blood character. 1). Ni En

Hematocrit value, erythrocyte count, erythrocyte resistance and O₂ consumption of blood carp submitted to injection of mercurious chloride or retention in this or sodium chloride solution, compared with these blood characteristics of control carp.**Yamada, J. et. al. (1962)**F
8-09521*Bull. Jap. Soc. sci. Fish.*, 28 (9) : 905-8

(On improving the efficiency of feed for fish culture. 2. Digestibilities of feedingstuff for rainbow trout and some trials on the improvement). Ni En

Tests made with diets labelled with P³² in the form of water-insoluble ammonium phospho-molybdate; the diets varied with respect to degree of milling (particle size), freshness of materials, composition.**Yamamoto, K. & F. Yamazaki (1961)**F
8-09522*Bull. Fac. Fish. Hokkaido*, 12 (2) : 93-110Rhythm of development in the oocyte of the gold-fish, *Carassius auratus*

Ovarian changes in weight and external features; morphological changes of the maturing oocytes; seasonal changes in stage composition of oocytes.

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- Yamazaki, F.** (1961) F
8-09523
Bull. Fac. Fish. Hokkaido, 12 (3) : 167-80
 The effects of hypophysectomy on the ovary of the goldfish, *Carassius auratus*

Examination of various methods of hypophysectomy and histological study of the effects of the operation.

- Vernick, S. H.** (1962) F
8-09524
 Thesis, Fordham University, USA, 67 p.
 The effects of temperature, light and high frequency radio waves upon the embryonic development of *Tilapia macrocephala* (Bleeker)

DA 23 (4) : 1174-5. Laboratory experiments on stock colony of fish at the American Museum of Natural History.

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R.C. Ist. lombardo, (B), 94 (1) : 63-74
 Gruppi sanguigni e ibridazione interspecifica in pesci e uccelli (Blood groups and interspecific hybridization in some fishes and birds). *It En*

Blood groups have been found in the sparrow of Sicily and in the white fishes of lake Maggiore. The group indicates that these fishes result from hybridization between *Coregonus wartmanni-coeruleus* and *C. schinzii-elveticus*.

- Sommani, E.** (1962) F
8-09526
Boll. Pesca Piscic. Idrobiol., 16 (1) : 156-67
 Principali fattori naturali determinanti il grado di pescosità nei corsi d'acqua (The principal natural factors determining the fishing productivity in current waters). *It*

Geological, geographical, physical, climatic and biological factors influencing the Italian fresh water fauna.

- Merla, G.** (1961) F
8-09527
Z. Fisch., 10 (7) : 659-734
 Beiträge zur Kenntnis des Wachstums und der Ernährung des Karpfens (*Cyprinus carpio* L.) (Contribution to the knowledge of growth and food of the carp, *Cyprinus carpio* L.). *En Ru*

Reports on results of experiments carried out in Eastern Germany in 1957 and 1958. Tables, bibliography.

Rogowski, U. & F. W. Tesch (1961)

F
8-09528

Z. Fisch., 10 (7) : 735-47

Erste Nahrung fressfähig gewordener Fischbrut (First food of fish fry).
En Ru

Food examination with the fry of *Lucioperca lucioperca* L., *Perca fluviatilis* L., *Osmerus eperlanus* L. and *Coregonus albula* L. from the Müggelsee showed that the first food consists mainly of nauplii and copepods. *Esox lucius* feeds immediately on bigger food animals.

Amlacher, E. (1961)

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M

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M

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C.R. Acad. Sci., Paris, 256 (10) : 2244-6

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N.Z.J. Sci., 5 (4) : 517-20
Pallenopsis triregia, a new species of Pycnogonida from near Three Kings Islands, New Zealand

Pallenopsis triregia n. sp. characterized by having a glabrous trunk, widely spaced lateral processes, single-jointed chelifore scape and eight-jointed female oviger is described. A key to the four New Zealand species of the genus *Pallenopsis* is given.

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J. Shimonoseki Coll. Fish., 11 (3) : 539-76
 A comparative study of the chromosomes in marine gastropods, with some remarks on cytotaxonomy and phylogeny

Chromosomes in male germ cells of 53 spp. representing 16 families and 3 orders; notes are given, for each sp., of habitat, and number and form of chromosomes; each is illustrated.

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J. Shimonoseki Coll. Fish., 11 (3) : 399-406

(On isolation of crustacean chitin. 1. Decalcification by EDTA-₂Na solution and enzymatic hydrolysis of incidental protein). Ni En

Rate of decalcification and nitrogen content of residue for each method.

Krishnamurthy, K. (1961)

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J. Mar. biol. Ass. India, 3 (1/2) : 271-2

Occurrence of a very early stage of *Parapegasus natans* (Linnaeus) from the nearshore waters of Porto Novo, South India

Morphological notes.

Satyanarayana, A. V. V. (1961)

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J. Mar. biol. Ass. India, 3 (1/2) : 269-70

A record of *Panulirus penicillatus* (Olivier) from the inshore waters off Quilon (Kerala)

Note on collection site and brief description of the specimen.

Rangarajan, K. & C. Sankarankutty (1961)

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J. Mar. biol. Ass. India, 3 (1/2) : 265-7

A note on abnormal *Leonnates jousseaumei* Gravier (Family Nereidae-Polychaeta). Ni

Morphological notes.

Pillai, N. K. (1961)

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J. Mar. biol. Ass. India, 3 (1/2) : 267-9

On the occurrence of *Microprosthem a validum* Stimpson in Indian waters

Ill. morphological notes.

Noble, A. (1961)

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J. Mar. biol. Ass. India, 3 (1/2) : 262-3

A note on the occurrence of the blue green alga *Aphanocapsa littoralis* Hansg. var. *Macrocoeca* Hangs. causing colouration of the sand and its relation with the tides

Rao, K. V. (1961)

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J. Mar. biol. Ass. India, 3 (1/2) : 235-56

On two opisthobranchiate molluscs, *Placobranchus ocellatus* Hasselt and *Discodoris boholiensis* Bergh, from Indian waters not hitherto been recorded

Ill. morphological description.

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 The pearl wing shell, *Pteria penguin* (Röding) from the Andaman Islands, India

Measurements and descriptive notes.

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- Rao, K. V. & K. Alagarwami** (1961)
J. Mar. biol. Ass. India, 3 (1/2) : 256-9
 External morphology and early development of *Pleurobranchus* (*Oscanius*) sp. from Gulf of Mannar

Ill. description of adult and of early developmental stages.

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- Larsson, S. G.** (1962)*
Nord. Med., 67 : 816-8
 (From protozoan to metazoan. 12. Crinoidea). *Da*

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- Manning, R. B.** (1962)
Crustaceana, 4 (4) : 301-6
 A redescription of *Lysiosquilla biminiensis pacificus* Borradaile (Stomatopoda)

Considers *L. b. pacificus* synonymous with *L. multifasciata*. Gives figures and a comparative table of characters for 4 closely related *Lysiosquilla* spp. Issued also as: *Contr. Mar. Lab. Univ. Miami*, (385).

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The effect of toxicity of nereistoxin upon aquatic animals

Experiments to determine the toxicity to fish and other aquatic animals of a paralytic poison isolated from the body of a marine annelid isome, *Lumbriconereis heteropods* Marenz.

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Semi-popular account of visits to the Tuamotu Archipelago, Vietnam and Japan for the purpose of studying coral reefs in various aspects and the cultivation of pearl oysters.

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Melbourne. Melbourne University Press, 475 p.
Marine molluscs of Victoria

Ill. handbook divided into parts dealing with Amphineura (chitons), Gastropoda (univalves), Scaphopoda (tusk shells), Pelecypoda (bivalves) and Cephalopoda (many-armed molluscs). 486 ill. of approximately the same number of spp. Each taxon is diagnosed, each main sp. is described, localities reported and some ecological notes given. Bibliography, glossary and index.

- McMichael, D. F.** (1962) M
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Brisbane, Jacaranda Press, 127 p.
Some common shells of the Australian seashore

Popular pocket book. The introduction discusses scientific name, further reading, shell collecting and terminology. 287 spp. are illustrated, and brief notes are given on range, colour and size.

- Sankarankutty, C.** (1961) M
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J. Mar. biol. Ass. India, 3 (1/2) : 101-19
On Decapoda Brachyura from the Andaman and Nicobar Islands. 1.
Families Portunidae, Ocypodidae, Grapsidae and Mictyridae

Distribution notes, with morphological notes in some cases, of 30 spp. of which 9 are new records.

- Sankarankutty, C.** (1961) M
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J. Mar. biol. Ass. India, 3 (1/2) : 120-36
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Distribution notes, with morphological notes in some cases, for 36 spp.

- Seshappa, G.** (1961) M
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J. Mar. biol. Ass. India, 3 (1/2) : 153-78

Vertical distribution and general ecology of some of the common intertidal organisms of the Northumberland coast

Description of the site; distribution and general ecology of some of the common organisms; designation of discernible zonation.

- Rangarajan, K. & S. Mahadevan** (1961) M
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J. Mar. biol. Ass. India, 3 (1/2) : 179-85
On a new species of *Nothria* Malmgren (Polychaeta, Annelida) from the Gulf of Mannar

Ill. morphological description with notes on habit and habitat, and key to *Nothria* spp. described from Indian waters.

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Observations in freshwater localities in Greenland of eight species of invertebrates which normally live in salt or brackish water.

- Clench, W. J. & R. D. Turner** (1962) MF
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J. malac. Soc. Aust., (6) : 3-33

Monographs of the genera *Papustyla*, *FORCARTIA* and *Meliobba* (Papuinae: Camaenidae)

Description of spp. in the genera *Papustyla*, *FORCARTIA* (nov. gen.), and *Meliobba*, giving morphological description and in some cases anatomical notes resulting from discussions.

- Rao, K. V.** (1961) MF
8-10245
J. Mar. biol. Ass. India, 3 (1/2) : 186-97

Development and life history of a nudibranchiate gastropod *Cuthona adyarensis* Rao

A complete series of development stages from fertilised eggs to juveniles is described from specimens reared under laboratory conditions.

- Stefani, R.** (1961)* MF
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J. Mar. biol. Ass. India, 3 (1/2) : 146-52

Studies on the shrimp *Caridina laevis* (Heller). 4. The neurosecretory system

Histo-cytological description and examination of the mode of secretion release. Co 8-10248.

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J. Mar. biol. Ass. India, 3 (1/2) : 137-45

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Description of branchial cavity, structure of branchiae, gill lamellae and nephrocytes, and experimental evidence on the mechanism and course of the respiratory current. Co 62-05110.

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Hemoproteins in the gut fluids of molluscs

CA 57 (13) : 17222.

Blasius, C. (1962) F
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Protoplasma, 55 : 497-51
Motility of the amebocytes of the blood of (the fresh water mussel) *Anodonta cygnaea*

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Kolenkine, X. (1963) F
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C.R. Acad. Sci., Paris, 256 (6) : 1381-4
Incorporation de thymidine tritiée chez *Hydra attenuata* normale et en cours de régénération (Incorporation of thymidine treated with tritium in *Hydra attenuata* during normal and regeneration period)

Wiggins, C. B. (1962) F
8-10253
Canad. J. Zool., 40 (5) : 879-91
A new subfamily of phryganeid caddisflies from western North America (Trichoptera: Phryganeidae)

The discovery of the larval, pupal, and egg stages of *Yphria californica* has provided the necessary evidence for a re-evaluation of the family designation and systematic relationships of this unique species. A new subfamily, the Yphriinae, is, however, created in the Phryganeidae to receive this single species. Descriptions of all stages of the species are given, also observations on the ecology and behaviour.

Motas, C. (1961) F
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Zool. Iceland, 3 (55) : 20 p.
Halacaridae

Lists 8 species recorded in Iceland; notes on ecology and distribution.

Hardcastle, W. S. (1962) F
8-10255
Louisiana Conserv., 14 (5-6) : 14-6, 21
Progress report: Aquatic vegetation control

Co 62-05384. With specific reference to Louisiana discusses research and control.

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Ecology, 43 (2) : 325-8

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 8-10256

The effect of temperature and feeding on the intrinsic rate of increase of three species of *Hydra*

The species studied were *Hydra littoralis*, *Chlorophydra viridissima* and *Hydra pseudoligactis*.

Webbe, G. (1962)
Bull. World Hlth Org., 27 (1) : 59-86

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The transmission of *Schistosoma haematobium* in an area of Lake Province, Tanganyika. Fr

Records the results of studies carried out over a two-year period. The ecology of a variety of snail habitats is described, and data on the biology of the principal molluscan host (*Bulinus (Physopsis) nasutus productus*), on seasonal fluctuations in its population density and associated cercarial infection rates, on its response to dessication and on other aspects of population dynamics are presented and discussed.

Olivier, L., W. T. Haskins & J. Gurian (1962)
Bull. World Hlth Org., 27 (1) : 87-94

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The action of very low concentrations of sodium pentachlorophenate on freshly laid eggs of *Australorbis glabratus*. Fr

Techniques for collecting the eggs without damage and for conducting the tests are described. The demonstration of greater susceptibility of the eggs to the compound suggests that snail control might be accomplished more economically in some situations if the chemical were directed primarily against the eggs. The possibility of using eggs instead of adults for screening potential molluscicides is also discussed.

Meyling, A. H., C. H. J. Schutte & R. J. Pitchford (1962)
Bull. World Hlth Org., 27 (1) : 95-8

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Some laboratory investigations on Bayer 73 and ICI 24223 as molluscicides. Fr

Report on tests of chemical properties and molluscicidal activity. Describes the method used for the determination of ICI 24223.

Crossland, N. O. (1962)
Bull. World Hlth Org., 27 (1) : 125-34

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A mud-sampling technique for the study of the ecology of aquatic snails, and its use in the evaluation of the efficacy of molluscicides in field trials. Fr

Describes a sampling technique suitable for estimating the population densities of African aquatic snails in the field by the removal of a plug of mud and its subsequent detailed examination.

Mandahl-Barth, G. (1962)F
8-10261*Bull. World Hlth Org.*, 27 (1) : 135-50

Key to the identification of east and central African freshwater snails of medical and veterinary importance

This identification key has been prepared to enable field workers in eastern and central Africa to identify the species and subspecies of snails acting as intermediate hosts of various flukes causing bilharziasis and related diseases in man and his domestic stock. The area covered by the key is eastern Africa, from the Sudan and Somalia in the north to Southern Rhodesia in the south. The key includes all species and subspecies of the three medically and veterinarily important genera, *Limnaea*, *Bulinus* and *Biomphalaria*. All other freshwater pulmonates of the area can be identified as to genus only. Those features of the shells and soft parts of snails which are used in identification are discussed in some details, and indications are given as to methods of collection, preservation and dissection of snails.

McCullough, F. S. (1962)F
8-10262*Bull. World Hlth Org.*, 27 (1) : 161-70Further observations on *Bulinus* (*Bulinus*) *truncatus rohlfsi* (Clessin) in Ghana. Fr**Ritchie, L. S., M. G. Radke & F. F. Ferguson (1962)**F
8-10263*Bull. World Hlth Org.*, 27 (1) : 171-81Population dynamics of *Australorbis glabratus* in Puerto Rico Fr.

This report on the population dynamics of *Australorbis glabratus* in Puerto Rico is based on observations made over about two years at 50 collecting-sites in a representative range of snail habitats.

Yeo, D. (1962)F
8-10264*Bull. World Hlth Org.*, 27 (1) : 183-7

A preliminary statistical analysis of snail counts

One problem in research into the epidemiology and control of bilharziasis is the adequate statistical examination of snail counts. This note describes a semi-empirical approach to the problem, which may be of value and may tempt a trained statistician into a more comprehensive and informed study.

Suzuki, S. & T. Hatakeyama (1961)F
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Ecological studies on the aquatic fungi in lake Yamanakako

WPA 36 (2) 208. Study on seasonal distribution in a Japanese lake.

Suzuki, S. (1961)F
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Three new harpacticoid copepods from the subterranean waters of Shikoku in Japan I.

Morphological description of *Nitocrella japonica* n. sp., *N. Yokotai* n. sp. and *Attheyella morimotoi* n. sp.

- Ito, T. (1962)** F
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Jap. J. Zool., 13 (2) : 275-92

Groundwater copepods from the Ryu-Kyu Islands

Descriptions of 15 new spp. collected in 39 localities (wells and caves); tables are given of measurements and counts made on specimens.

- Stanley, G. J., Jr. (1963)** F
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Science, 139 (3554) : 484-5

A stonefly aquatic in the adult stage

Brief note on an undescribed sp. of Plecoptera of the genus *Capnia* from California and Nevada which appears to pass its entire life history at depths of 200-264 feet.

- Gurevich, A. A. (1961)*** F
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Bot. Zh., 46 (1) : 112-5

Nabliudeniia nad obrazovaniem i prorastaniem zigot u *Spirogyra weberi* Kütz (Observations of zygote formation, and germination in *Spirogyra weberi* Kütz)

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Trans. A-1307 : 11 p.

Observations of zygote formation and germination in *Spirogyra weberi* Kütz

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Photoreduction at λ 705 m μ in adapted algae

NSA 17 (2) 1187. Results are reported from studies on the mechanism of oxygen evolution from water in the light in green algae. Photosynthesis and photoreduction at various light intensities were measured in the same cell in *Ankistrodesmus* and in a mutant of *Scenedesmus*.

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A revision of the gobioid fish genus *Coryphopterus*
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Experiments carried out with white whale, *Delphinapterus leucas*, during whaling at Proven, west Greenland.

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Biological study of red fish (*Sebastes marinus*), particularly in Greenland waters; development of red fish fisheries in North Atlantic.

Emerov, B. D. (1962)*

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Letop. Sev., (3) : 188-200

Kistorii kitovoinogo promysla na russkom severe (History of whaling in the Russian north)

Activities in White Sea, Barents Sea and North Pacific in 18th and 19th centuries.

Kamshilov, M. M. (Ed.)

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[Collected papers on marine biology of Barents Sea]

Ford, M. C. (1962)

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Verheijen, F. J. (1962)

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Gas spitting by alarmed fish disturbs their hydrostatic equilibrium

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- Meehan, W. R. & L. Revet** (1962) MF
8-10399
Progr. Fish Cult., 24 (4) : 185-7
The effect of tricaine methanesulfonate (M.S. 222) and/or chilled water on oxygen consumption of sockeye salmon fry

Presents results of three series of laboratory tests in connection with use of anaesthetic and cold water in transportation of fry.

- Wilimovsky, N. J.** (Ed.) (1962) MF
8-10400
Vancouver, Univ. of British Columbia, 226 p.
H. R. MacMillan lectures in fisheries. Symposium on pink salmon

Do 60-200me. Contains 8-10401 to 8-10415.

- Neave, F.** (1962) MF
8-10401
In 8-10400: 3-14

The observed fluctuations of pink salmon in British Columbia

A description of the kinds and magnitude of the changes in abundance of *Oncorhynchus gorbuscha* in British Columbia (1917-1959) and of the kinds of data used for this description.

- Royce, W. F.** (1962) MF
8-10402
In 8-10400: 15-33
Pink salmon fluctuations in Alaska

Describes locale of fishery and some aspects of biology of *Oncorhynchus gorbuscha*, and history of fishery and its management. Discusses fluctuations in annual catch and trends in seasonal catch, the obvious factors associated with the decline in stocks and extent of the decline. Defines some of the problems.

AQUATIC STOCKS

- Taguchi, K.** (1962) MF
In 8-10400: 35-50 8-10403
Some problems of the pink salmon fisheries in Asian waters

With respect to *Oncorhynchus gorbusha*, describes fluctuations in catches of offshore waters and reproduction of Asian stocks.

- Vernon, E. H.** (1962) MF
In 8-10400: 53-8 8-10404
Pink salmon populations of the Fraser River system

Describes life-history, experiments, management problems, etc. with respect to *Oncorhynchus gorbusha*.

- Merrell, T. R. Jr.** (1962) MF
In 8-10400 : 59-72 8-10405
Freshwater survival of pink salmon at Sashin Creek, Alaska

Describes observations on *Oncorhynchus gorbusha* with special reference to number of spawners, time of spawning and stream gradient in a stream whose stocks are affected only negligibly by a fishery.

- Wickett, W. P.** (1962) MF
In 8-10400 : 73-86 8-10406
Environmental variability and reproduction potentials of pink salmon in British Columbia

Discusses the environmental factors affecting *Oncorhynchus gorbusha* especially the permeability of stream gravels.

- Sheridan, W. L.** (1962) MF
In 8-10400 : 87-102 8-10407
Relation of steam temperatures to timing of pink salmon escapements in southeast Alaska

Purpose is to show that pink salmon streams in southeast Alaska differ in time of escapement and water temperature, to bring out the relation between these variables, and to postulate reasons for existence of differential timing of runs and for the necessity for time of egg deposition to be coordinated with subsequent temperatures during development.

- Gilhousen, P.** (1962) MF
In 8-10400: 105-11 8-10408
Marine factors affecting the survival of Fraser River pink salmon

Relates some facts and concepts assembled by the IPSFC with respect to *Oncorhynchus gorbusha*.

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Manzer, J. I. & M. P. Shepard (1962)

MF

8-10409

In 8-10400 : 113-22

Marine survival, distribution and migration of pink salmon (*Oncorhynchus gorbuscha*) off the British Columbia coast

Hartt, A. C. (1962)

MF

8-10410

In 8-10400 : 123-33

Observations on pink salmon in the Aleutian Island area 1956-1960

Some of the significant findings regarding *Oncorhynchus gorbuscha* based on purse seine fishing and tagging operations by the United States are discussed. Subjects treated are annual abundance, origin of stocks, route and timing of migrations, lengths, and growth of maturing pink salmon passing through Aleutian waters en route to spawning grounds.

Ishida, T. (1962)

MF

8-10411

In 8-10400 : 135-9

Aspects of the marine biology of Asiatic pink salmon

A review of findings on offshore distribution of different populations of *Oncorhynchus gorbuscha* and an enumeration of problems for study arising from such results.

Worlund, D. D. & R. A. Fredin (1962)

MF

8-10412

In 8-10400 : 143-53

Differentiation of stocks

Reviews some statistical procedures for classifying fish in a mixed population on the basis of differences in characteristics, and for estimating the relative abundance of different populations in areas of intermingling. Presents a few examples involving only two populations in an area of intermingling, and one example involving more than two populations. For one of the examples involving two populations, describes a procedure for estimating the variance of the estimate of relative abundance.

Ricker, W. E. (1962)

MF

8-10413

In 8-10400 : 155-201

Regulation of the abundance of pink salmon populations

Presents a series of points which might have a bearing on inequality of the two lines (odd-year and even-year) of *Oncorhynchus gorbuscha* stocks and hypotheses held on these to account for dominance.

Parker, R. R. (1962)

MF

8-10414

In 8-10400 : 203-11

A concept of the dynamics of pink salmon populations

Discusses mortality and survival of *Oncorhynchus gorbuscha* with special reference to moving environment.

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Thompson, W. F. (1962) MF
8-10415
In 8-10404 : 213-26

The relationship between numbers spawning and numbers returning in Pacific salmon

Theoretical treatment of the general subject with specific reference to *Onchorychus*.

Haas, H. J. (1962)* MF
8-10416
Developm. Biol., 5 : 1-34

Studies on mechanisms of joint and bone formation in the skeleton rays of fish fins

Sick, K., M. Westergaard & O. Frydenberg (1962) MF
8-10417
Nature, Lond., 193 : 1001-2

Haemoglobin pattern and chromosome number of American, European, and Japanese eels (*Anguilla*)

Attempts to find cytological and genetical differences. Only the Japanese eels showed a different haemoglobin pattern. No inter-group differences with respect to size or shape of the chromosomes were detected.

Bevelander, G. & R. J. Goss (1962) MF
8-10418
Nature, Lond., 193 : 1098-9

Influence of tetracycline on calcification in normal and regenerating teleost scales

Investigations carried out on *Fundulus heteroclitus* show that the bulk of the calcium laid down is added at the margins of a scale. This supports the contention that the scale grows more rapidly along the proximal margin, and at a somewhat slower rate laterally.

Masai, H. & S. Matano (1961)* MF
8-10419
Yokohama med. Bull., 12 : 271-6

Comparative neurological studies on respiratory enzymic activity in the central nervous system of submammals. 2. Fishes and Amphibia

McDonald, M. R. (1962)* MF
8-10420
J. gen. Physiol., 45 (4) Pt. 2 : 77-92

Deoxyribonuclease from salmon testes. 1. Purification and properties

Mancini, E. (1962)* MF
8-10421
Boll. Soc. ital. Biol. sper., 38 : 443-7

(Changes in the respiratory rhythm of fish obtained with acoustic stimuli). *It*

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Schnitzlein, H. N. (1962)*
J. comp. Neurol., 118 : 225-67

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The habenula and the dorsal thalamus of some teleosts

Denton, E. J. (1961)*
Progr. Biophys., 11 : 177-234

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 8-10423

The buoyancy of fish and cephalopods

Robertson, O. H. & B. C. Wexler (1962)
J. Morph., 110 : 171-85

MF
 8-10424

Histological changes in the pituitary gland of the Pacific salmon (genus *Oncorhynchus*) accompanying sexual maturation and spawning

A study was made of the histology and cytology of the pituitary gland in several species of Pacific salmon with special reference to those changes occurring at the time of spawning. Comparison is made between the histological changes described in the spawning Atlantic salmon and those occurring in the Pacific salmon. The many similarities between the degenerative changes occurring in the pituitary of the Pacific Salmon and those found in the aging pituitaries of other vertebrates, including man, are pointed out.

Ridgway, G. J. (1962)*
Ann. N.Y. Acad. Sci., 97 : 111-5

MF
 8-10425

Demonstration of blood groups in trout and salmon by isoimmunization

Sorbachev, K. F., S. F. Zadvorochnov & F. A. Isaev (1962)*
Biokhimiia, 27 : 202-7

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 8-10426

(On the problem of fish immunization). *Ru*

Papermaster, B. W. et al. (1962)*
Nature, Lond., 195 : 84

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 8-10427

Toxicity of endotoxin and snake venom in the hagfish

Jones, I. C., J. G. Phillips & D. Bellamy (1962)*
Gen. comp. Endocr. Suppl., 1 : 36-47

MF
 8-10428

Studies on water and electrolytes in cyclostomes and teleosts with special reference to *Myxine glutinosa* L. (the hagfish) and *Anguilla anguilla* L. (the Atlantic eel)

Rybak B., H. Hoffmeister & H. Ruska (1962)*
Life Sci., 4 : 109-14

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 8-10429

(Studies on the ultrastructural physiology of the auricle of the branchial heart of *Myxine glutinosa*). *Fr*

- Sano, Y., M. Kawamoto & K. Hamana** (1962)* MF
Acta Anat. Nippon, 37 : 117-25 8-10430
 (Evolutional research on the caudal neurosecretory system of salmon-trout).
Ni
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Gen. comp. Endocr., 2 : 283-5 8-10431
 Proteinases of the pituitaries of several fish and of a whale
- Baggerman, B.** (1962)* MF
Gen. comp. Endocr. Suppl., 1 : 188-205 8-10432
 Some endocrine aspects of fish migration
- Egami, N. & S. Ishii** (1962)* MF
Gen. comp. Endocr. Suppl., 1 : 248-53 8-10433
 Hypophyseal control of reproductive functions in teleost fishes
- Fontaine, M. & J. Leloup** (1962)* MF
Gen. comp. Endocr., 2 : 317-22 8-10434
 (Thyroid function of the adult salmon (*Salmo salar* L.) during various stages of its migratory cycle). *Fr*
- Hoar, W. S.** (1962)* MF
Gen. comp. Endocr. Suppl., 1 : 206-16 8-10435
 Reproductive behaviour of fish
- Uno, T., T. Tokunaga & M. Nakamura** (Kudo, G. Transl.) (1960)* MF
 11 p. 8-10436
 Chemical studies on the body tissues of the salmon, *Oncorhynchus keta*, after spawning
En 1956, Uno, T., T. Tokunaga & M. Nakamura. Available from Office of Technical Services, Department of Commerce, Washington, D.C.
- Pora, E. A., C. Wittenberger & I. Oros** (1962)* MF
J. Physiol. Path. gén., 54 : 402 8-10437
 (Research on the physiology of the red muscle of teleosts). *Fr*
- Ramaswami, L. S.** (1962)* MF
Gen. comp. Endocr. Suppl., 1 : 286-99 8-10438
 Endocrinology of reproduction in fish and frog
- Yamamoto, T.** (1962)* MF
Gen. comp. Endocr. Suppl., 1 : 341-5 8-10439
 Hormonic factors affecting gonadal sex differentiation in fish

- Kallman, K. D.** (1962) MF
8-10440
J. Genet., 58 (1) : 7-21
 Gynogenesis in the teleost, *Mollienesia formosa* (Girard), with a discussion of the detection of parthenogenesis in vertebrates by tissue transplantation
 Describes experiments using descendants of individuals collected near Brownsville, Texas, and the eastern Florida area.
- Davis, R. A.** (1963) F
8-10441
Ann. appl. Biol., 51 : 345-8
 Feral coypus in Britain
 Discusses distribution of *Myocastor coypus* in E. England.
- Iankov, G.** (1961)* F
8-10442
Ribno Stop., (5) : 15-7
 Lechenie na ikhtioftiriazisa pri pusturvite (Treatment of ichthyophthiriasis in trouts). *Bu*
- Crossman, E. J.** (1962)* F
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Contr. Life Sci. Div. Ont. Mus., (55) : 29 p.
 The grass pickerel *Esox americanus vermiculatus* Le Sueur in Canada
- Boschi, E. E. & M.-L. Fuster de Plaza** (1959)* F
8-10444
Publ. Dep. Invest. pesq. Repub. argent., (8) : 61 p.
 Estudio biológico pesquero del pejerrey del embalse del Rio III (*Basilichthys bonariensis*). Con una contribución al conocimiento limnológico del ambiente (Fisheries biological study of the silverside from Rio Tercero (*Basilichthys bonariensis*). With a contribution to the limnological knowledge of the environment)
- Gordon, M. S.** (1959)* F
8-10445
Anat. Rec., 134 (3) : 571-2
 Rates of exchange of chloride ions in rainbow trout (*Salmo gairdneri*) acclimated to various salinities
- Matty, A. J. & K. Green** (1963) F
8-10446
J. Endocrin., 25 (4) : 411-25
 Permeability and respiration effects of thyroïdal hormones on the isolated bladder of the toad *Bufo bufo*
- Isaev, A. I.** (Ed.) (1959)* F
8-10447
 Moskva, Pishchepromizdat, 374 p.
 Spravochnik po prудovomu rybovodstvu (Manual on pond culture)

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Sabaneev, L. P. (1960)* F
8-10448
Kaliningradskoe knizhnoe izd-vo, 660 p.
Zhizn' i lovia presnovodnykh ryb (Life and catch of freshwater fishes)

Mekhanik, F. Ya. (1959)* F
8-10449
16 p.
Growth and metabolism of Ladoga salmon and rainbow trout fry under different temperatures

En 1956, Mekhanik, F. Ya. Available from the Library of Congress, Washington, D.C.

Legendre, V. (1960)* F
8-10450
Jeune Nat., 10 (9-10) : 177-212
Clef des Cyprinidés ou ménés du Québec (Key to the cyprinids of Quebec)

Ammon, R. & H. Bockendahl (1962) F
8-10451
Arzneimittel-Forsch., 12 : 812-5
Reversal of goldfish poisoning by organic phosphates
CA 57 (13) : 17226.

Schanzel, H. & E. Hegerova (1961) F
8-10452
Sborn. vys. Šk. zeměd. lesn. Fak. Brna, (3/4) : 261-4
Toxic effect of sodium pentachlorophenolate on fishes
CA 57 (13) : 17227. Na pentachlorophenolate affects innfish (*Rutilus rutilus*) unfavorably. The effect is directly proportional with time and its concn. Use of this against *Galba truncatula* should be very limited. Its application against slugs is more promising.

Motelica, I. (1961) F
8-10453
Rev. biol. Acad. Roum., (6) : 467-75
The influence of adrenaline on the glycemia of carp
CA 57 (13) : 17228.

Deminatti, M. & M. M. Zahnd (1962) F
8-10454
C. R. Soc. Biol., Paris, 156 : 925-6
Histoautoradiographic study of penetration of sodium sulfate-S³⁵, methionine-S³⁵, and phenylalanine-H³ into the embryo of an ovoviviparous fish, *Mollinnesia*

CA 58 (3) : 2682.

Tahsin Mohsen, M. (1963)

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8-10455

C.R. Acad. Sci., Paris, 256 (6) : 1385-7

Sur le système génital mâle chez *Jenynsia lineata* (Cyprinodontiformes, Jenynsiidae) et les affinités phylogénétiques de cette espèce avec les familles voisines (On the male genital system in *Jenynsia lineata* (Cyprinodontiformes, Jenynsiidae) and the phylogenetic affinities of this species with related families)

Preliminary note; reports anatomical observations and discusses affinities with Anablepidae and Goodeidae.

Girgis, S. (1961)

F
8-10456

Comp. Biochem. Physiol., 3 : 206-17

Aquatic respiration in the common Nile turtle, *Trionyx triunguis* (Forsk.)

IABS 24 (3) 6438. The quiet submerged animal used up 6.5 ml. O₂/kg./hr. Of this pharyngeal respiration used up approx. 30%, the remainder being due to cutaneous respiration.

Swift, D. R. (1962)

F
8-10457

Comp. Biochem. Physiol., 6 : 91-3

Evidence for absence of an endogenous growth-rate rhythm in brown trout (*Salmo trutta* Linn)

IABS 27 (3) 6873. Brown trout grown under const. temp. conditions with a standard diet do not show rhythmic growth cycles. All fish tended to grow at the rate of 1%/week.

Elkan, E. (1962)

F
8-10458

Nature, Lond., 196 (4858) : 958-60

Dermocystidium gasterostei n. sp. a parasite of *Gasterosteus aculeatus* L. and *Gasterosteus pungitius* L.

Surber, E. W. (1959)

F
8-10459

Proc. Stheast. Ass. Game Comm., 13 : 313-25

Suggested standard methods of reporting fish population data for reservoirs; prepared for the Reservoir Committee, Southern Division of the American Fisheries Society

Lawrence, J. M. (1960)

F
8-10460

Proc. Stheast. Ass. Game Comm., 14 : 257-8

Estimated sizes of various forage fishes chain pickerel can swallow

Presents, in tabular form, a preliminary estimate of the sizes of gizzard shad, *Dorosoma cepedianum*, bluegills, *Lepomis macrochirus*, golden shiner, *Notemigonus crysoleucas*, and green sunfish, *Lepomis cyanellus*, that various sizes of chain pickerel, *Esox niger*, can swallow.

Pasztor, V. M. & H. Kleerekoper (1962)

Canad. J. Zool., 40 (5) : 785-802

The role of the gill filament musculature in teleosts

A study of gill filaments using visual and oscillographic methods.

F
8-10461

Saunders, R. L. (1962)

Canad. J. Zool., 40 (5) : 817-82

The irrigation of the gills in fishes: 2. Efficiency of oxygen uptake in relation to respiratory flow activity and concentration of oxygen and carbon dioxide

Co 62-03961. Respiratory volumes, percentage utilizations of oxygen, and rates of oxygen consumption were measured in non-swimming and swimming white suckers, brown bullheads, and carp under various ambient levels of oxygen and carbon dioxide.

F
8-10462

Allison, L. N. (1962)

Progr. Fish Cult., 24 (4) : 155

Cataract among hatchery-reared lake trout

Data suggests that prolonged exposure to direct sunlight of young lake trout (*Salvelinus namaycush*) causes cataract formation.

F
8-10463

Needham, P. R. & R. J. Behnke (1962)

Progr. Fish Cult., 24 (4) : 156-8

The origin of hatchery rainbow trout

Discusses origin of the hatchery rainbow trout in the U.S. and presents evidence that the original Shasta rainbow used was a mixture of two types of rainbows.

F
8-10464

Surber, E. W. & Q. H. Pickering (1962)

Progr. Fish Cult., 24 (4) : 164-71

Acute toxicity of endothal, diquat, hyamine, dalapon, and silvex to fish

Summary of the results of a study of the acute toxicity to fish of herbicides that showed promise in control of submersed aquatic plants. Endothal, diquat, silvex, hyamine 1622, hyamine 2389 and dalapon were tested.

F
8-10465

Normandeau, D. A. (1962)

Progr. Fish Cult., 24 (4) : 172-6

Microhematocrit values for some salmonids reared in New Hampshire

An attempt was made to to set up a statewide norm, but each station varied so greatly that this was not possible.

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- Richards, M.** (1961)*
Boise, Idaho Fish and Game Dept., Fisheries Division, 42 p.
Tests for increasing the returns of hatchery trout
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Fish. Gaz., Quezon City, 6 (1) : 6 p.
Method of collecting and transporting live teuthid fry (padas) for stocking
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- Fontenele, O.** (1959)*
Publ. Serv. Piscic., Fortaleza, (177) : 15 p.
Contribution to the biology of the pirarucu, *Arapaima gigas*—(Cuvier) in captivity (Actinopterygii, Osteoglossidae)
- F
8-10471
- Krefft, G.** (1961)*
Arch. Fisch Wiss., 12 (1/2) : 24-38
Beryx splendens, ein Erstfund in nordeuropäischen Gewässern nebst Bemerkungen zum Auftreten von *B. decadactylus* (First record of *Beryx splendens* in north European waters with notes on the occurrence of *B. decadactylus*). En
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- Bond, C. E.** (1961)*
Tech. Bull. agric. Sta., Corvallis, (58) : 42 p.
Keys to Oregon freshwater fishes
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- McMullen, D. B. et al.** (1962)
Bull. World Hlth Org., 27 (1) : 25-40
Bilharziasis control in relation to water resources development in Africa and the Middle East. Fr
Includes discussion of use of molluscicides and herbicides and relation of bilharziasis to fish culture.
- F
8-10474
- McMullen, D. B. & J. Francotte** (1962)
Bull. World Hlth Org., 27 (1) : 5-24
Report on a preliminary survey by the WHO Bilharziasis Advisory Team in Upper Volta. Fr
Survey made in 1960. In addition to discussion of epidemiologist, etc., includes report on incidence of vectors in fish ponds, no. of ponds, ecological data for freshwaters.

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- Malek, E. A.** (1962) F
8-10475
Bull. World Hlth Org., 27 (1) : 41-58

Bilharziasis control in pump schemes near Khartoum, Sudan, and an evaluation of the efficacy of chemical and mechanical barriers. Fr

Discusses use of copper sulfate as a molluscicide.

- Hoffman, G. L.** (1962) F
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Fish. Leaflet, Wash., (508) : 3 p.

Whirling disease of trout

NE 62-06134.

- Liem, K. F.** (1963)* F
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Illinois biol. Monogr., (30) : 149 p.

The comparative osteology and phylogeny of the Anabantoidei (Teleostei, Pisces)

- Uchihashi, K., H. Shinamura & A. Honda** (1962) F
8-10478
Bull. Japan Sea Fish. Res. Lab., (10) : 75-81

(An experimental study on the sleeping of fish (gold fish)). Ni En

A conditioned reflex was established under various light conditions and was used to determine the time at which this sp. (*Carassius auratus*) sleeps, and the depth and nature of the sleep.

- Oh, Y.** (1962) F
8-10479
Jap. J. Zool., 13 (2) : 383-93

Immuno-electrophoretic analysis of water-soluble proteins of fish egg

Study of water-soluble proteins of ripe unfertilized eggs and of the yolk sac of the third day embryos of an oviparous cyprinodont, the medaka (*Oryzias latipes*), by means of agar electrophoresis.

- Kobayashi, T.** (1959) F
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Sci. Rep. Hokkaido Salm. Hatch., (14) : 1-4

(Application of biological stain for fish study. 1. Effectiveness of biological stain for the study of scale in rainbow trout by injection). Ni En

Experiments with alizarin red S and lead acetate injected into body muscle of rainbow trout with the objective of causing a mark on the scale at the time of injection.

- Bauer, O. N.** (1962)* F
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PL-480 Int. : 8 p.

Development of parasitofauna in fishes of new water reservoirs

En 1954, Bauer, O. N. Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

- Hikita, T. et al.** (1959) F
8-10482
Sci. Rep. Hokkaido Salm. Hatch., (14) : 91-121
 (Some biological observations on the rainbow trout, *Salmo gairdneri irideus*, in the Nishibetsu River, with special reference to the consumption of salmon eggs and fry by predaceous fishes). *Ni En*

Identification of spp. preying on salmon eggs and fry with examination of feeding rates and habits of these spp. Fishing exploitation of these spp. is also examined.

- Tokui, T.** (1959) F
8-10483
Sci. Rep. Hokkaido Salm. Hatch., (14) : 169-92
 (Studies on the kokanee salmon in lake Towada, northern Honshu, Japan.
 2. Climatic and hydrologic factors). *Ni En*

Examination of behaviour of the sp. in relation of temperature, precipitation and other climatic features. *Co* 8-11248.

- Miyamori, H.** (1962) F
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Zool. Mag., Tokyo, 71 (6) : 191-5
 (Study on the estrogen-induced feminization in male gonads of teleost, *Lebistes reticulatus*). *Ni En*

Morphological and histological evidence of changes induced by treatment with ethinylestradiol and a diet containing the same substance.

- Jozuka, K., K. Jozuka & K. Mashiko** (1962) F
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Zool. Mag., Tokyo, 71 (8) : 269-73
 (Accumulation of ^{45}Ca by the regenerating fish scale). *Ni En*

Observations on *Carassius auratus* from which scales were removed and which were placed in dilute seawater containing ^{45}Ca .

- Sreenivasan, A.** (1962) F
8-10486
Progr. Fish Cult., 24 (4) : 181
 Use of endrin in fishery management

Use of toxicant to remove undesirable fish (*Gambusia affinis*) from Ooty Lake, India, which permitted carp (*Cyprinus carpio*) to spawn. Also gives 24-hour lethal dosage for several species of Indian fishes (*Tilapia*, *Channa*, *Rasbora*, *Danio*, *Barbus*).

- Post, G.** (1962) F
8-10487
Progr. Fish Cult., 24 (4) : 182-4
 Furazolidone (nf-180) for control of furunculosis in trout

Recommends dosage of 25 milligrams per kilogram of fish per day for a minimum of 20 days for control of furunculosis.

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8-10488
- Bullock, G. L.** (1962)
Progr. Fish Cult., 24 (4) : 184
 A new medium for isolation and presumptive identification of *Aeromonas salmonicida*

Describes test using Furunculosis Agar for isolation and presumptive identification of *Aeromonas salmonicida*.

- F
8-10489
- Mairs, D. F. & T. E. Kennedy** (1962)
Progr. Fish Cult., 24 (4) : 188-9
 Evaluation of some heparinized capillaries for microhematocrit determinations of warm-water fishes

Data points out necessity of adequate testing for clot-free samples before there is any attempt to determine "normal" microhematocrit values.

- F
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- Anderson, G. A.** (1962)
Progr. Fish Cult., 24 (4) : 190-2
 Three portable feeders for metering chemical into streams for control of sea lamprey

Describes gravity, fuel pump and electric pump feeders for metering out controlled concentrations of chemical solutions.

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8-10491
- Ingalls, T. H. & U. Murakami** (1962)*
Arch. Environ. Health, 5 : 114-21
 Cyclopia, ectromelia, and other monstrosities in zebra fish

- F
8-10492
- Qadri, S. S.** (1962)*
J. Protozool., 9 : 254-8
 An experimental study of the life cycle of *Trypanosoma danilewskyi* in the leech, *Hemiclepsis marginata*

- F
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- Karbaat, J. et al.** (1962)*
Ned. milit. geneesk. Arch., 15 : 33-43
 (Wounds caused by piranha (*Serrasalmus rhombeus* L.)). Ne

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- Fox, H.** (1961)*
Acta anat., 47 : 156-63
 The segmentation of components in the hind region of the head of *Neoceratodus* and their relation to the pronephric tubules

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M
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(Vertical migrations of the herring and methods of utilizing them in fishing)
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Jap. J. Ichthyol., 8 (5/6) : 122-5

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(Diseases of young Baltic salmon under conditions of artificial rearing)

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BA 38A (2) 4987.
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Distribution and ecology of fishes of the Mystic River Estuary, Connecticut

BA 39A (5) 17663.

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Priroda, Moskva, 2 : 66-72

Sud'ba grenlandskogo tiulenia (The fate of the harp seal)

BA 39A (5) 17764.

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BA 39A (5) 17747.

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Influence of early maturing females on reproductive potential of Columbia River blueback salmon (*Oncorhynchus nerka*)

A fecundity study in 1957-59 revealed that the average egg content of 1-year ocean females was approximately one-third less than that of 2-year-ocean females. The average egg content of 3-year-ocean females was, in turn, about one-fourth greater than that of 2-year-ocean females. Analysis of the age group fecundity and sex ratio data showed that the number of spawners or even females does not always accurately portray the reproductive potential of an escapement. Erroneous reproduction estimates seriously distort escapement-return relationships.

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Abundance and age of Kvichak River red salmon smolts

BA 39E (6) 21807. Standardized methods are described for use of an index fyke net to determine annually the abundance of smolt migrations from the Kvichak River system, Bristol Bay, Alaska. Details of the fyke-net construction are presented.

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Ryb. Khoz., 6 : 35

Nerest ostrovykh v raione Dongosrybzapovednika (The spawning of sturgeon in the region of the Don state fish refuge)

BA 39E (6) 21813. In the stomachs of 16% of the *Blicca bjoerkna* examined in 1959, and of 8% in 1960, sturgeon eggs were discovered. They were also discovered in the stomachs of the sterlet (*Acipenser ruthenus*). Undigested eggs in various stages of development were found. It is assumed that the sterlet spawns in the lower reaches of the Don.

Kukiev, M. A. (1962)*

MF
8-11285

Referat. Zh. (Biol.) (En Transl.), 2128

The spawning of sturgeon in the region of the Don state fish refuge

En 8-11284.

Tomoda, Y. (1962)

F
8-11286

Jap. J. Ichthyol., 8 (5/6) : 126-46

(Studies of the fishes of lake Biwa-ko. 1. Morphological study of the three species of catfishes of the genus *Parasilurus* from lake Biwa-ko, with reference to their life). *Ni En*

Morphological features, including body proportions.

Penczak, T. (1962)

F
8-11287

Ann. zool., Warsz., 20 (17) : 335-41

Ciernik (*Gasterosteus aculeatus* L.) z Nowej Szkocji, Nowej Fundlandii i wyspy francuskiej Saint-Pierre (The stickleback (*Gasterosteus aculeatus* L.) from Nova Scotia, Newfoundland and the French Island Saint-Pierre). *En*

Comparisons, primarily morphometric, based on 46 specimens.

Ogino, C. & S. Yasuda (1962)

F
8-11288

Bull. Jap. Soc. sci. Fish., 28 (8) : 788-91

(Changes in inorganic constituents of developing rainbow trout eggs). *Ni En*

Changes in wet weight, water, dry matter and mineral content.

Shiraishi, Y. & N. Suzuki (1962)

F
8-11289

Bull. Freshw. Fish. Res. Lab., Tokyo, 12 (1) : 83-107

(The spawning activity of ayu-fish, *Plecoglossus altivelis*). *Ni En*

Study of the spawning locality, the diurnal and seasonal reproductive habits and the effect of environmental conditions on the eggs produced.

- Ito, T.** (1962) F
8-11290
Bull. Freshw. Fish. Res. Lab., Tokyo, 12 (1) : 75-81

(Harvests of wild goldfish, common carp and freshwater shrimps, in relation to standing crop of netplankton and bottom fauna in farm ponds, Shioda Plain, Nagano Prefecture). *Ni En*

Estimation of standing crop of plankton and bottom fauna (serving as natural foodstuffs) in six farm ponds and calculation of the correlation between these estimates of crop and the fish harvest taken from the ponds. Equations are given for the harvest obtained from the food crops.

- Nakahara, K.** (1962) F
8-11291
Mem. Fac. Fish. Kagoshima, 11 (1) : 14-7

(On the spawning behaviour of a cardinal fish, *Apogon notatus* (Houttuyn). *Ni En*

Season and water temperature of spawning; courting and mating behaviour.

- Yamamoto, K.** (1962) F
8-11292
Annot. zool. jap., 35 (3) : 156-61

Origin of the yearly crop of eggs in the medaka, *Oryzias latipes*

Histological examination of ovaries taken from females at monthly intervals through the year.

- Chaudry, H. S. & A. B. Das** (1962) F
8-11293
Annot. zool. jap., 35 (1) : 20-2

Note on the occurrence of a fourth branchial branch of the vagus nerve in certain carps

Ill. morphological description.

- Arai, R. & N. Egami** (1961) F
8-11294
Annot. zool. jap., 34 (4) : 185-92

Occurrence of leucophores on the caudal fin of the fish *Oryzias latipes*, following administration of androgenic steroids

Observations on a number of leucophores on the caudal fin of normal fish indicating sexual differences and variation through the breeding season. Similar observations on fish treated with testosterone and other steroids.

- Kiener, A.** (1962) F
8-11295
Bull. Madagascar, 12 (197) : 883-902

Perspectives et intérêts de la . . . rizipisciculture à Madagascar (Prospects and importance of . . . fish culture in rice fields in Madagascar)

TA (2) k939. In Madagascar this form of fishery (*Paratilapia polleni*) has been known for a long time. With introduction of a carp by 'Service des Eaux et Forêts' in 1926, the application of fish culture in rice fields has been extended to some 150 ha. Expansion to 10% of country's 900,000 ha of rice fields is feasible.

Keiz, G. (1959)F
8-11296*Naturwissenschaften*, 46 : 610

Die Abhängigkeit des Rohfettgehaltes der Leber des Karpfens (*Cyprinus carpio*) L. von der Jahreszeit, der Ernährung und den Geschlecht sowie über die Beziehungen zum Gehalt an fettlöslichem Vitamin A (The dependence of the crude fat content of the liver of the carp (*Cyprinus carpio* L.) on season, feeding and sex and its relation to the content of fat-soluble vitamin A)

NAR 30 (3) 4422.

Stolk, A. (1959)F
8-11297*Naturwissenschaften*, 46 : 409-10

High-fat diet and mast cell count in myocardium of some teleosts

NAR 30 (2) 2584. Healthy young male and female *Lebistes reticulatus* (Peters), *Xiphophorus helleri* (Heckel), and *Xiphophorus maculatus* (Günther) were kept in glass tanks with tap water. Given no food or algae or *Enchytraeus* or a low-fat diet or a high-fat diet with cholesterol.

Stolk, A. (1959)F
8-11298*Naturwissenschaften*, 46 : 476-7

Leucine aminopeptidase activity in mesenterial mast cells of the carp

NAR 30 (2) 2585.

Sukhoverkhov, F. M. (1959)F
8-11299*Vest. sel.-khoz. Nauk*, (8) : 58-67

Metody i effektivnost kormleniia ryby v prудakh (Methods and effectiveness of feeding fish in ponds). En De Fr

NAR 30 (4) 6247. All-Union Institute of Fishpond Culture made 80 practical trials with 30 types of food. Carp were found to eat without harm oil-cakes unsuitable for feeding livestock. By use of properly balanced mixtures yield was increased on some fish farms from between 6 and 7.5 to 20 or 25 centners per ha. Examples are given of managements and results on different farms. Natural foods should provide at least 16 or 17 per cent of diet.

Sorvachev, K. F. & G. P. Novgorodova (1959)F
8-11300*Vestn. mosk. Univ., (Biol.)*, (4) : 17-23

Raspredelinie S³⁵-metionina v organakh i tkaniakh karasei pri razlichnykh usloviyakh obitaniia (Distribution of metionine-³⁵S in organs and tissues of carp in different environmental conditions)

NAR 30 (4) 6250. *Carassius carassius*, placed in aquaria with labelled methionine.

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- Neifakh, A. A. & I. M. Shapiro** (1962) F
8-11301
Dokl. Akad. Nauk. SSSR, 144 : 942-4
 (A radiation study of the function of oocytes in the process of ovulation in the loach). *Ru*
 NSA 16 (20) 26795.
- Radway, A. K.** (1961) F
8-11302
Proc. N.Z. ecol. Soc., 8 : 66-70
 Relations between Salmonidae and the native freshwater fauna in New Zealand
 BA 38A (2) 4823.
- Goncharov, C. D.** (1959) F
8-11303
Trud. Soveshch. ikhtiol. Kom., 9 : 34-8
 Virusnaia krasnukha ryb v SSSR i za rubezhom (Virus dropsy of fish in the USSR and abroad)
 BA 38A (2) 4952.
- Goncharov, G. D.** (1960)* F
8-11304
Referat. Zh. (Biol.) (En Transl.), 100141
 Virus dropsy of fish in the USSR and abroad
En 8-11303.
- Kanaev, A.** (1961) F
8-11305
Rybovod. i Rybolov., 1 : 14-7
 Sanitarnaia obrabotka prudov (Sanitational treatment of ponds)
 BA 38A (2) 4956.
- Kanaev, A.** (1961)* F
8-11306
Referat. Zh. (Biol.) (En Transl.), 13D417
 Sanitational treatment of ponds
En 8-11305.
- Kanaev, A. I. & E. M. Lyaiman** (1959) F
8-11307
Trud. Soveshch. Ikhtiol. Kom., 9 : 28-33
 Epizooticheskoe sostoianie stada ryb v prudovykh khoziaistvakh RSFSR (The situation as regards epidemic fish diseases in hatcheries of the RSFSR)
 BA 38A (2) 4957. Four infectious and 9 invasive diseases of carp were found in the hatcheries of the RSFSR.

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- Kanaev, A. I & E. M. Lyaiman** (1960)*
Referat. Zh. (Biol.) (En Transl.), 100140
 The situation as regards epidemic fish diseases in hatcheries of the RSFSR
En 8-11307.

- Kelley, J. W.** (1962)
Trans. Amer. Fish. Soc., 91 (1) : 23-8
 Sexual maturity and fecundity of the largemouth bass *Micropterus salmoides* (Lacépède), in Maine
 BA 38A (2) 4958.

- Kramer, R. H. & L. L. Smith, Jr.** (1962)
Trans. Amer. Fish. Soc., 91 (1) : 29-41
 Formation of year classes in largemouth bass
 BA 38A (2) 4959.

- Lopukhina, A. M.** (1959)
Trud. Soveshch. Ikhtiol. Kom., 9 : 110-3
 Zabolevaniia sigovykh i amurskikh ryb pri ikh vyrashchivanii v prudovykh khoziaistvakh USSR (Diseases of whitefishes and oriental carps when reared in the ponds of the Ukrainian SSR)
 BA 38A (2) 4964.

- Lopukhina, A. M.** (1960)*
Referat. Zh. (Biol.) (En Transl.), 100145
 Diseases of whitefishes and oriental carps when reared in the ponds of the Ukrainian SSR
En 8-11311.

- Maloney, J. E., D. H. Schupp & W. J. Scidmore** (1962)
Trans. Amer. Fish. Soc., 91 (1) : 42-52
 Largemouth bass population and harvest, Gladstone Lake, Crow Wing County, Minnesota

BA 38A (2) 4967. Factors influencing angling exploitation and size-structure of the catch of largemouth bass (*Micropterus salmoides*) from a 481-acre Minnesota lake are considered.

F

8-11314

McFadden, J. T. & E. L. Cooper (1962)*Trans. Amer. Fish. Soc.*, 91 (1) : 53-62An ecological comparison of six populations of brown trout (*Salmo trutta*)

BA 38A (2) 4969. Estimates of population density of all species of fish except the sculpin were made in selected areas of three hard-water streams and three soft-water streams in Pennsylvania to compare these two water-types.

F

8-11315

McFadden, J. T., E. L. Cooper & J. K. Andersen (1962)*Trans. Amer. Fish. Soc.*, 91 (1) : 94-5

Sex ratio in wild populations of brown trout

BA 38A (2) 4970. The sex ratio of brown trout (*Salmo trutta*) was determined by dissection of 810 specimens captured from 12 streams in Pennsylvania.

F

8-11316

Minckley, W. L. (1962)*Trans. Amer. Fish. Soc.*, 91 (1) : 95

Spring foods of juvenile blue catfish from the Ohio River

BA 38A (2) 4973. The stomachs of 21 juvenile *Ictalurus furcatus* (LeSueur) contained primarily benthic aquatic insects in March.

F

8-11317

Mueller, J. W. & L. C. Rockett (1962)*Trans. Amer. Fish. Soc.*, 91 (1) : 63-8

The effect of harvest, migration and stocking on the rainbow trout spawning potential in a Wyoming Lake

BA 38A (2) 4976. Lake DeSmet, a 2,100 acre lake, is managed for rainbow trout (*Salmo gairdneri*) production and is a primary source of eggs.

F

8-11318

Shpolianskaia, A. Iu. (1959)*Trud. Soveshch. ikhtiol. Kom.*, 9 : 81-5

Zabolevaniia ikry i molodi ryb na rybovodynykh predpriiatiakh Rosglavgosrybvoda (Disease of the eggs and young fish in fish rearing stations of the Russian State Fisheries Administration)

BA 38A (2) 4988.

F

8-11319

Shpolyanskaya, A. Yu. (1960)**Referat. Zh. (Biol.) (En Transl.)*, 100142

Disease of the eggs and young of fish in fish rearing stations of the Russian State Fisheries Administration

En 8-11318.

- F
8-11320
- Sukhoverkhov, F. & P. Krymova** (1961)
Rybovod. i Rybolov., 1 : 18-9
 Vliianie solei kobal'ta na rost karpa (Effect of cobalt salts on the growth of carp)
 BA 38A (2) 4992.
- F
8-11321
- Sukhoverkhov, F. & P. Krymova** (1961)*
Referat. Zh. (Biol.) (En Transl.), 13D418
 Effect of cobalt salts on the growth of carp
En 8-11320.
- F
8-11322
- Cooper, E. L., J. A. Boccardy & J. K. Andersen** (1962)
Progr. Fish. Cult., 24 (2) : 74-80
 Growth rate of brook trout at different population densities in a small infertile stream
 BA 39A (5) 17731. Growth of brook trout (*Salvelinus fontinalis*) in a small infertile tributary stream of the Appalachian Mountains is apparently controlled by a combination of factors, and not by population density alone.
- F
8-11323
- Dmitrieva, E. N.** (1960)
Trud. Inst. Morf. Zhiv., 25 : 99-136
 Sravnitel'nyi analiz etapov razvitiia sudaka *Lucioperca lucioperca* (Linné) Volgi, Dona i Kubani (A comparative analysis of the stages of development of pike-perches (*Lucioperca lucioperca* Linné) from the Volga, Don and Kuban Rivers)
 BA 39A (5) 17734.
- F
8-11324
- Dmitrieva, E. N.** (1961)*
Referat. Zh. (Biol.) (En Transl.), 1D454
 A comparative analysis of the stages of development of pike-perches (*Lucioperca lucioperca* Linné) from the Volga, Don and Kuban Rivers)
En 8-11323.
- F
8-11325
- Swift, D. R. & G. E. Pickford** (1962)
Amer. Zool., 2 (3) : 451
 Seasonal variations in the growth hormone content of pituitary glands of the perch, *Perca fluviatilis* L
 Study of growth promoting potency of perch pituitary glands collected from Windermere at different times of the year. Male *Fundulus heteroclitus*, hypophysectomized 8-9 weeks, received intraperitoneal injections thrice weekly for 6 weeks. CR 8-06426.

- Morton, K. E.** (1962) F
8-11326
Progr. Fish. Cult., 24 (2) : 94-6
 Experimental heating of pond water to start rainbow trout fry on a dry diet

BA 39A (5) 17744.

- Shanks, W. E., G. D. Gahimer & J. E. Halver** (1962) F
8-11327
Progr. Fish. Cult., 24 (2) : 68-73
 The indispensable amino acids for rainbow trout

BA 39A (5) 17751.

- Singh, V. P.** (1961) F
8-11328
Proc. zool. Soc. Bengal, 14 (1) : 53-60
 An investigation into the composition of the algal food of *Gadusia chapra* (Ham.)

BA 39A (5) 17754.

- Belyi, N. D.** (1961) F
8-11329
Ryb. Khoz., 6 : 25-7
 Razmnozhenie ryb na iskusstvennykh gnezдах v Kakhovskom vodokhranilishche (The reproduction of fish in artificial nests in the Kakhovsk reservoir)

BA 39E (6) 21797.

- Belyi, N. D.** (1962)* F
8-11330
Referat. Zh. (Biol.) (En Transl.), 2167
 The reproduction of fish in artificial nests in the Kakhovsk reservoir
En 8-11329.

- Levinson, M. D.** (1961) F
8-11331
Ryb. Khoz., 4 : 28-31
 Sokhranit' i uvelichit' zapasy Dneprovskogo leshcha i sudaka (Conserve and increase the stock of Dnepr bream and zander)

BA 39E (6) 21814. Observations on *Stizostedion lucioperca* and *Abramis brama*.

- Levinson, M. D.** (1962)* F
8-11332
Referat. Zh. (Biol.) (En Transl.), 2160
 Conserve and increase the stocks of Dnepr bream and zander
En 8-11331.

MISCELLANEOUS AND AUXILIARIES

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Anon. (1963)

M
8-11333

Fish. Newslett. Aust., 22 (2) : 16

200 ft. down, 26 hours at surface pressure

Issued also as: *New Scient.*, 15 (305) : 596.

Tasmania. Laws, Statutes, etc. (1962)

M
8-11334

Statut. Rules Aust., (86) : 2 p.

Fisheries (scallop season) order 1962, made under the fisheries act 1959.—
9 May 1962

Regulations in respect of open and closed areas and seasons for the taking
of scallop.

Tasmania. Laws, Statutes, etc. (1962)

M
8-11335

Statut. Rules Aust., (87) : 32 p.

Sea fisheries regulations 1962, made under the fisheries act 1959.—9 May
1962

Extensive regulations in respect of licensing, prohibitions and protection
of certain species, fishing craft, penalties, etc.

Canada. Laws, Statutes, etc. (1962)

M
8-11336

Can. Gaz. (II), (19) : 1048

SOR/62-370. Order in council P.C. 1962-1345 amending the New Bruns-
wick fishery regulations made under the fisheries act.—27 September 1962

Amendment respecting quahaug fishing in part of Miramichi Bay.

Canada. Laws, Statutes, etc. (1962)

M
8-11337

Can. Gaz. (II), (19) : 1097

DORS/62-370. Décret C.P. 1962-1345 modifiant le règlement de pêche
du Nouveau-Brunswick en vertu de la loi sur les pêcheries.—27 septembre
1962 (SOR/62-370. Order in council P.C. 1962-1345 amending the New
Brunswick fishery regulations made under the fisheries act.—27 September
1962)

Fr 8-11336.

Canada. Laws, Statutes, etc. (1962)

M
8-11338

Can. Gaz. (II), (19) : 1049

SOR/62-371. Order in council P.C. 1962-1346 amending the Nova Scotia
fishery regulations made under the fisheries act.—27 September 1962

Concerns closed season for oysters.

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Canada. Laws, Statutes, etc. (1962)
Can. Gaz. (II), (19) : 1098

DORS/62-371. Décret C.P. 1962-1346 modifiant le règlement de pêche de la Nouvelle Écosse en vertu de la loi sur les pêcheries.—27 septembre 1962 (SOR/62-371. Order in council P.C. 1962-1346 amending the Nova Scotia fishery regulations made under the fisheries act.—27 September 1962)

Fr 8-11338.

M
8-11340

Canada. Laws, Statutes, etc. (1962)
Can. Gaz. (II), (19) : 1050

SOR/62-372. Order in council P.C. 1962-1347, amending the Prince Edward Island fishery regulations made under the fisheries act.—27 September 1962

Prohibits the use of an otter trawl in fishing from a vessel in the South Lake harbour area.

M
8-11341

Canada. Laws, Statutes, etc. (1962)
Can. Gaz. (II), (19) : 1099

DORS/62-372. Décret C.P. 1962-1347 modifiant le règlement de pêche de l'Île-du-Prince-Édouard en vertu de la loi sur les pêcheries.—27 septembre 1962 (SOR/62-372. Order in council P.C. 1962-1347, amending the Prince Edward Island fishery regulations made under the fisheries act.—27 September 1962)

Fr 8-11340.

M
8-11342

France. Laws, Statutes, etc. (1962)
J. off. Répub. franç., (75) : 3301

Arrêté du 19 février 1962 relatif à la pêche au feu dans les eaux de la direction de Marseille (Order relating to fishing with lights in the waters of the Marseille directorate.—19 February 1962)

Contains technical specifications.

M
8-11343

Iraq. Laws, Statutes, etc. (1960)
Wkly Gaz. Rep. Iraq, (43) : 837-43

Government notice No. 653. Law No. 22 of 1960 relative to the ratification of the trade agreement between the governments of the Republic of Iraq and the Kingdom of Denmark.—27 January 1960

Imports include tinned fish.

MISCELLANEOUS AND AUXILIARIES

Iraq. Laws, Statutes, etc. (1960) M
8-11344
Wkly Gaz. Rep. Iraq, (43) : 844-7

G.N. No. 564. Law No. 88 of 1960 relative to the ratification of the trade agreement between the governments of the Republic of Iraq and the Kingdom of Morocco.—17 July 1960

Imports include canned sardines.

Italy. Laws, Statutes, etc. (1962) M
8-11345
Gazz. uff. Repub. ital., (129) : 2064

Decreto ministeriale 24 marzo 1962 relativo alla disciplina dell'esercizio della pesca a strascico nelle acque del compartimento marittimo di Civitavecchia (Ministerial decree regulating trawl-fishing in the waters of the maritime department of Civitavecchia.—24 March 1962)

Authorized trawl-fishing for a period of one year at a distance of two miles from the coast.

Norway. Laws, Statutes, etc. (1962) M
8-11346
Norsk Lovtid., (5) : 50

Skriv om endring i forskrifter for handel med kraftfor og kunstgjødsel.—27. januar 1962 (Circular amending the provisions on trade in concentrated feeds and chemical fertilizers.—27 January 1962). *No*

Standards of composition for fishmeal and herring meal.

Peru. Laws, Statutes, etc. (1962) M
8-11347
Peruano, (6339) : 2 p.

Resolución ministerial No. 1171-DC por la que se modifica el art. 2 de la res. min. No. DC-341 sobre elementos de salvataje en las embarcaciones pesqueras.—16 de mayo de 1962 (Ministerial resolution No. 1171-DC amending article 1 of ministerial resolution No. DC-341 on life saving equipment on board fishing vessels.—16 May 1962)

Compulsory equipment shall include inflatable or non-inflatable lifeboats with capacity for the whole crew and in keeping with the characteristics laid down in the agreements on life security at sea.

Peru. Laws, Statutes, etc. (1962) M
8-11348
Peruano, (6321) : 1 p.

Decreto supremo No. 28 por el que se crea el Instituto Peruano de Especialización y Adiestramiento.—18 de mayo de 1962 (Supreme decree No. 28 establishing the Peruvian Specialization and Training Institute.—18 May 1962)

Institute's aims include determination of the country's needs in various fields including fishbreeding.

Peru. Laws, Statutes, etc. (1962)M
8-11349*Peruano*, (6325) : 1-2

Decreto supremo No. 008 que contiene disposiciones normativas ampliando el reglamento de la ley sobre jubilación obrera.—24 de mayo de 1962 (Supreme decree No. 008 containing normative provisions amplifying the regulations governing the workmen's pensions act.—24 May 1962)

Philippines. Laws, Statutes, etc. (1962)M
8-11350*Off. Gaz., Manila*, (33) : 5521

Fisheries administrative orders Nos. 48-1 and 59-1 suspending the provisions of rule 3 (h) of F.A.O. No. 59 and sections 7, 8 and 9 of F.A.O. No. 48.—14 May 1962

To develop the pearl culture industry, foreign technicians may be invited to the country without the obligation of disclosing the secret technique on pearl culture and production. Repeals all orders, regulations or parts thereof inconsistent with this production. Repeals all orders, regulations or parts thereof inconsistent with this order.

Portugal. Laws, Statutes, etc. (1962)M
8-11351*Diário do Gov., Lisboa*, 1 (20) : 89-90

Decreto n.º 44 167 : autoriza a direcção-geral da fazenda pública a emitir, pelo fundo de renovação e de apetrechamento da indústria da pesca, o obrigação geral representativa da 5.ª série do empréstimo de renovação e de apetrechamento da indústria da pesca (II plano de fomento), na importância de 74 000 000\$.—30 de janeiro de 1962 (Decree No. 14 167 authorizing the directorate-general of public finance to issue through the fishing industry renewal and supplies fund the bonds representing the 5th series of the fishing industry renewal and supplies loan (2nd development plan) for the amount of 74 million escudos.—30 January 1962). *Pr*

Portugal. Laws, Statutes, etc. (1962)M
8-11352*Diário do Gov., Lisboa*, 1 (22) : 96

Decreto n.º 44 173: autoriza a direcção geral da fazenda pública a emitir, pelo fundo de renovação da marinha mercante, a obrigação geral representativa da 4.ª série do empréstimo de renovação da marinha mercante (II plano de fomento), na importância de 100 000 000\$.—1 de fevereiro de 1962 (Decree No. 44 173 authorizing the directorate-general of public finance to issue on behalf of the merchant marine renewal fund, the bonds representing the 4th series of the merchant marine renewal loan (2nd development plan) for an amount of 100 million escudos.—1 February 1962). *Pr*

Portugal. Laws, Statutes, etc. (1962)M
8-11353*Diário do Gov., Lisboa*, 1 (23) : 97

Decreto n.º 44 174: adita varias disposições ao decreto n.º. 41 451, que actualiza e amplia a legislação que regula a industria da pesca da sardinha.—2 de fevereiro de 1962 (Decree No. 44 174 adding various provisions to the decree No. 41 541 bringing up to date and supplementing the legislation regulating the sardine fishing industry.—2 February 1962). *Pr*

Deals with registration and changes in the place of registration of vessels.

M

8-11354

Portugal. Laws, Statutes, etc. (1962)
Diário do Gov., Lisboa, 1 (72 Suppl.) : 321

Decreto-lei n.º 44 259: determina que ficam sujeitos às disposições da legislação do contencioso aduaneiro de território onde tiver sido emitido o certificado os responsáveis pelo fornecimento de falsas declarações para a emissão dos certificados de origem nacional das mercadorias transaccionadas entre territórios nacionais ou quem emita esses certificados com dados falsos ou inexactos.—31 de março de 1962 (Decree Law No. 44 259 providing that persons responsible for providing false information in connection with the issue of national certificates of origin in respect of goods entering into trade between national territories and also persons issuing such certificates with false or inaccurate data shall be subject to the provisions of the customs disputes legislation of the territory where the false certificate was issued.—31 March 1962). *Pr*

Also covers fish, crustaceans and molluscs.

M

8-11355

Portugal. Laws, Statutes, etc. (1962)
Diário do Gov., Lisboa, 1 (92) : 543

Decreto n.º 44 296: autoriza a importação, sob regime de draubaque, de tiras de alumínio, de espessura não inferior a 0,3 mm, destinadas ao fabrico de embalagens de conserva de peixe—Permite aos importadores, sem dependência de prévio despacho ministerial, usar de faculdade de garantir os direitos nos termos do artigo 443.º-A do regulamenti das alfândegas.—24 de abril de 1962 (Decree No. 44 296 authorizing the import under drawback of aluminium strips not less than 0.3 mm thick for the manufacture of fish preserve containers and permitting importers to guarantee duties without previous ministerial authorization in accordance with article 443-A of the customs house regulations.—24 April 1962). *Pr*

M

8-11356

Portugal. Laws, Statutes, etc. (1962)
Diário do Gov., Lisboa, 1 (107) : 708

Portaria n.º 19 181: introduz alterações no regimento da corporação da pesca e conservas, aprovado pela portaria n.º 16 875.—11 de maio de 1962 (Order No. 19 181 making amendments to the regulations governing the fisheries and fish preserves corporation as approved under order No. 16 875.—11 May 1962). *Pr*

Amendments of an administrative nature.

M

8-11357

Portugal. Laws, Statutes, etc. (1962)
Diário do Gov., Lisboa, 1 (135) : 814-20

Decreto n.º 44 398: aprova o regulamento da pesca de arrasto na provincia de Angola—Revoga o decreto de 15 de fevereiro de 1913, que aprovou o regulamento para a pesca no mar de Angola com embarcações a vapor e demais legislação que contrarie o disposto no presente diploma.—14 de junho de 1962) (Decreto No. 44 398 approving the trawl and drag fish regulations in the province of Angola, and repealing the decree of 15 February 1913 which approved the Angola sea fishing regulations using steam vessels and also all other legislation running counter to the provisions of this decree.—15 June 1962). *Pr*

Extensive legislation concerning fishing areas, fishing craft, equipment, etc.

Portugal. Laws, Statutes, etc. (1962)M
8-11358*Diário do Gov., Lisboa*, 1 (138) : 829-33

Lei n.º 2115: promulga as bases da reforma da previdência social—Revoga a lei n.º 1884.—18 de junho de 1962 (Act No. 2115 promulgating the bases of social provident fund reform and repealing act No. 1884.—18 June 1962). *Pr*

Also covers fishermen. Repeals act of 16 March 1935.

Portugal. Laws, Statutes, etc. (1962)M
8-11359*Diário do Gov., Lisboa*, 1 (146) : 885

Decreto n.º 44 423: d ánova redacção aos artigos 41.º, 45.º, et 46.º do regulamento da pesca de arrasto, promulgado pelo decreto n.º 36 615.—28 de junho de 1962 (Decree No. 44 423 redrafting articles 41, 45 and 46 of the trawl and drag fishing regulations as promulgated under decree No. 36 615.—28 June 1962). *Pr*

Amends decree of 24 Nov. 1947 and provides for penalties in the case of certain types of violation of existing regulations with respect to permitted fishing areas.

Spain. Laws, Statutes, etc. (1962)M
8-11360*Bol. ofic. Estado, Madr.*, (170) : 9915-6

Orden de 27 de junio de 1962 por la que se aprueba el cuadro general de vedas y dimensiones mínimas para la captura, circulación y venta en todo el territorio nacional de crustáceos y moluscos, así como las denominaciones de las concesiones de la zona marítimo-terrestre para su aprovechamiento pesquero (Order approving the general rules governing prohibitions and minimum sizes for the capture, transport and sale throughout the territory of the country of crustaceans and molluscs and also approving the denomination of the concessions in the coastal area where they may be fished.—27 June 1962)

U.K. Laws, Statutes, etc. (1962)M
8-11361*Statut. Instrum. U.K.*, (1615) : 4 p.

The herring subsidy (United Kingdom) scheme 1962.—4 July 1962

Provides for the payment of grants to the owners or charterers of fishing vessels engaged in catching herring, according to the category of the vessel.

U.K. Laws, Statutes, etc. (1962)M
8-11362*Statut. Instrum. U.K.*, (1616) : 6 p.

The herring industry (grants for fishing vessels and engines) scheme 1962.—4 July 1962

Concerns payment, by the Herring Industry Board, of grants to persons engaged, or proposing to become engaged, in the herring industry in respect of expenditure incurred in the acquisition of new fishing vessels and engines.

MISCELLANEOUS AND AUXILIARIES

U.K. Laws, Statutes, etc. (1962)

M
8-11363

Statut. Instrum. U.K., (2158) : 4 p.

The several and regulated fisheries (form of application) regulations 1962.—
21 September 1962

Prescribe the form of application to be submitted for the grant of several or regulating orders in respect of oyster, mussel or cockle fisheries under part 3 of the sea fisheries act 1868.

North Borneo. Laws, Statutes, etc. (1962)

M
8-11364

Govt Gaz., (4), 1st Suppl. : 135-6

No. 11 of 1962. The pearl oyster shell fishery (amendment) ordinance, 1962: an ordinance to amend the pearl oyster shell fishery ordinance. (Chapter 95 of the revised edition.—22 September 1962

Various amendments of working; in respect of granting permits to engage in the industry of pearl culture, etc.

Seychelles. Laws, Statutes, etc. (1962)

M
8-11365

Seychelles Govt Gaz., (45) : 47-8

S.I. No. 32 of 1962: the fisheries regulations (No. 2), 1962 made under the fisheries ordinance (Chapter 16).—2 August 1962

In respect of fishing reserves. Prohibits the dragging of any net across the seabed of reserves. Repeals the fisheries regulations, 1962.

Seychelles. Laws, Statutes, etc. (1962)

M
8-11366

Seychelles Govt Gaz., (52 Suppl.) : 68

S.I. No. 42 of 1962: the female turtles protection (No. 2) regulations, 1962 made under the turtles ordinance (Chapter 22).—1 October 1962

In respect of the green turtle or 'tortue de mer'.

Renaud-Debyser, J. & B. Salvat (1963)

M
8-11367

C.R. Acad. Sci., Paris, 256 (12) : 2712-4

Le calcul de biovolumes dans l'étude des chaînes alimentaires de la faune endogée des sédiments meubles intertidaux (The estimation of biovolumes in the study of food chains in the endogenous fauna of the intertidal mobile sediments)

Preliminary note: discusses the value of quantitative estimation of biomass in connection with the evaluation of food competition and biocoenoses composition.

Quillet, M. & M.-L. Priou (1963)

M
8-11368

C.R. Acad. Sci. Paris, 256 (13) : 2903-5

Sur la présence de la chitine dans les membranes de quelques algues rouges: Céramiacées et Lomentariacées (On the presence of chitin in the membrane of some red algae: Ceramiceae, and Lomentariaceae)

Preliminary results on *Bornetia secundiflora*, *Griffithsia flosculosa*, *Ceramium rubrum* and *Lomentaria articulata*.

Vicente, N. (1963)

M
8-11369

C.R. Acad. Sci., Paris, 256 (13) : 2928-30

Ablation de ganglions nerveux et osmorégulation chez *Aplysia rosea* Rathke (Gastéropode opisthobranche) (Removal of the nervous ganglions and osmoregulation in *Aplysia rosea* Rathke (Gasteropoda, Opisthobranchiata))

Vanney, J.-R. & Guilcher (1963)

M
8-11370

C.R. Acad. Sci., Paris, 256 (14) : 3170-1

La répartition des fonds sous-marins dans le 'Mor Bras' (Morbihan). Résultats préliminaires (The zonation of submarine bottoms in the 'Mor Bras' (Morbihan). Preliminary results)

Discusses results based on echo-sounding and dredging made during the spring 1962. Cruise of the 'Kornog'.

Argentina. Laws, Statutes, etc. (1962)

M
8-11371

Bol. ofic. Argent., (19.873) : 2 p.

Resolución N° 339 por la que se dictan normas a los exportadores.—3 de julio de 1962 (Resolution No. 339 laying down rules for exporters.—3 July 1962)

Exporters of a wide range of products, including fish, must submit a sworn statement in respect of the goods they are exporting to the National Directorate of External Trade.

Australia. Commonwealth Laws, Statutes, etc. (1962)

M
8-11372

Commonw. Aust. Gaz., (101) : 4374-5

Pearl fisheries notice No. 1 made under the pearl fisheries act 1952-1953.—20 November 1962

Contains prohibitions relating to taking of pearl shell (of the species *Pinctada margaritifera*), trochus and green snail, under the prescribed sizes and within the waters specified, except under a special permit.

MISCELLANEOUS AND AUXILIARIES

M
8-11373

Australia. Commonwealth Laws, Statutes, etc. (1962)
Commonw. Aust. Gaz., (101) : 4375

Pearl fisheries notice No. 2 made under the pearl fisheries act 1952-1953.—
 20 November 1962

Contains prohibitions relating to taking of pearls shell of the species
Pinctada maxima under the prescribed sizes and within the waters specified,
 except under a special permit.

M
8-11374

Australia. Commonwealth Laws, Statutes, etc. (1962)
Commonw. Aust. Gaz., (101) : 4375

Pearl fisheries notice No. 3 made under the pearl fisheries act 1952-1953.—
 20 November 1962

Contains prohibitions relating to the method of taking pearl shell, trochus,
 bêche-de-mer or green snail, except under a special permit.

M
8-11375

Australia. Commonwealth Laws, Statutes, etc. (1962)
Commonw. Aust. Gaz., (101) : 4375

Pearl fisheries notice No. 4 made under the pearl fisheries act 1952-1953.—
 20 November 1962

Contains prohibitions relating to the removal of live pearl shell, trochus,
 bêche-de-mer and green snail, except under a special permit.

M
8-11376

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz. N.S.W., (108) : 3190

Proclamation made under the fisheries and oyster farms act, 1935-1960.—
 10 October 1962

Prohibits the taking of fish by spears aided by lights, in the specified tidal
 waters, from 23 Nov. 1962 to 22 Nov. 1972.

M
8-11377

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz. N.S.W., (118) : 3455

Proclamation, made under the fisheries and oyster farms act, 1935-1960,
 relating to portion of the waters of Salamander Bay, county of Gloucester.—
 31 October 1962

Prohibits the taking of fish by the use of hauling nets in the tidal waters
 specified, from 1 Feb. 1963 to 31 Jan. 1968.

M
8-11378

Queensland. Laws, Statutes, etc. (1962)
Qd Govt Gaz., (34) : 804

Order in council amending the order in council of 22 December 1949,
 made under the fisheries act, 1957 to 1959.—8 November 1962

Addition of a twenty-fifth schedule in respect of bait for taking sprats,
 anchovies, pilchards, herrings and hardiheads in tidal waters.

- M
8-11379
- Queensland. Laws, Statutes, etc. (1962)**
Qd Govt Gaz., (34) : 805
 Order in council made under the fisheries act, 1957 to 1959.—8 November 1962

Prohibits, as from 1 January 1963, the taking by the use of a net of all fish in the specified waters, between 6 p.m. on Friday and 6 p.m. on Sunday of every week in each year, exception being made as regards in particular the taking of herrings, hard-heads and prawns by the use of a cast net.

- M
8-11380
- Queensland. Laws, Statutes, etc. (1962)**
Qd Govt Gaz., (38) : 886
 Order in council made under the fisheries acts, 1957 to 1959.—15 November 1962

Repeals the order of 15 Mar. 1962 and prohibits the taking of fish in the specified waters by any net, except the taking of herrings, hardiheads, or prawns by means of a cast or "umbrella" net.

- M
8-11381
- Queensland. Laws, Statutes, etc. (1962)**
Qd Govt Gaz., (43) : 1324
 Order in council made under the fisheries acts, 1957 to 1962.—29 November 1962

Repeals order in council of 11 Nov. 1948. Prohibits the taking of fish by the use of a net in the waters and during the periods specified, except herrings, hardi-heads, or prawns by a cast or "umbrella" net, and sprats, anchovies, pilchards, herrings or hardiheads by a bait net.

- M
8-11382
- Queensland. Laws, Statutes, etc. (1962)**
Qd Govt Gaz., (43) : 1324
 Order in council made under the fisheries acts, 1957 to 1962.—29 November 1962

Authorizes the taking (i) of herrings, hardiheads and prawns by a cast or "umbrella" net; (ii) the taking of sprats, anchovies, pilchards, herrings and hardiheads by a bait net.

- M
8-11383
- Queensland. Laws, Statutes, etc. (1962)**
Qd Govt Gaz., (43) : 1324-5
 Order in council made under the fisheries acts, 1957 to 1962.—29 November 1962

Prohibits the taking of fish by the use of a net in the waters and during the periods specified, except herrings, hardiheads or prawns by a cast or "umbrella" net, and sprats, anchovies, pilchards, herrings or hardiheads by a bait net.

MISCELLANEOUS AND AUXILIARIES

Federal Republic of Cameroun. Laws, Statutes, etc. (1962) M
8-11384
J. off. Caméroun, (13) : 664

Décret 62-DF-216 du 25 juin 1962 définissant les lignes à partir desquelles dans les golfes, baies et rades sont comptées les eaux territoriales camerounaises (Decree 62-DF-216 defining the delimitations from which the Cameroon territorial waters, within gulfs, bays and roadsteads are reckoned.—25 June 1962)

Under article 5 of the merchant marine code, the territorial waters of Cameroon have a breadth of six nautical miles.

Canada. Laws, Statutes, etc. (1962) M
8-11385
Can. Gaz. (II), (21) : 1165

SOR/62-418. Order in council P.C. 1962-1502 amending the Nova Scotia fishery regulations, made under the fisheries act.—25 October 1962

Description of contaminated areas where the taking of shellfish is prohibited.

Canada. Laws, Statutes, etc. (1962) M
8-11386
Can. Gaz. (II), (21) : 1219

DORS/62-418.—Décret C.P. 1962-1502 modifiant le règlement de pêche de la Nouvelle-Écosse en vertu de la loi sur les pêcheries.—25 octobre 1962 (SOR/62-418. Order in council P.C. 1962-1502 amending the Nova Scotia fishery regulations, made under the fisheries act.—25 October 1962)

Fr 8-11385.

Canada. Laws, Statutes, etc. (1962) M
8-11387
Can. Gaz. (II), (21) : 1178-81

SOR/62-426. Amendment of the ships' crews regulations, 1960, made under the financial administration act.—25 October 1962

Concerns payment for security duty, payment for holidays, sick leaves, military leaves, etc.

Canada. Laws, Statutes, etc. (1962) M
8-11388
Can. Gaz. (II), (21) : 1232-5

DORS/62-426. Modifications du règlement de 1960 concernant les équipages de navires, en vertu de la loi sur l'administration financière.—25 octobre 1962 (SOR/62-426. Amendment of the ships' crews regulations, 1960, made under the financial administration act.—25 October 1962)

Fr 8-11387.

Canada. Laws, Statutes, etc. (1962) M
8-11389
Can. Gaz. (II), (22) : 1224

SOR/62-446. Shellfishing order pursuant to the New Brunswick fishery regulations made under the fisheries act.—29 October 1962

Reopens several shellfish areas for the taking of clams.

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Canada. Laws, Statutes, etc. (1962)

M

8-11390

Can. Gaz. (II), (22) : 1278

DORS/62-446. Ordonnance sur la pêche coquillière en vertu du règlement de pêche du Nouveau-Brunswick, selon la loi sur les pêcheries.—29 octobre 1962 (SOR/62-446. Shellfishing order pursuant to the New Brunswick fishery regulations made under the fisheries act.—29 October 1962)

Fr 8-11389.

Colombia. Laws, Statutes, etc. (1962)

M

8-11391

Diario ofic., Bogota, (30891) : 619

Resolución Núm. 0059 de 17 de enero de 1962 que fija modalidades para la pesca de la langosta en la costa Atlántica (Resolution No. 0059 laying down the measures governing lobster fishing on the Atlantic coast.—17 January 1962)

Prohibits lobster fishing off the Atlantic coast between 1 Feb. and 30 Jun. inclusive each year.

Colombia. Laws, Statutes, etc. (1962)

M

8-11392

Diario ofic., Bogota, (30852) : 124

Decreto Núm. 1656 de 28 de junio de 1962 por el cual se fijan modalidades para la expedición de patentes y se deroga el artículo 7° del decreto No. 1409 de 1958 (Decree No. 1656 laying down the terms for the issue of fishing licences and rescinding article 7 of decree No. 1409 of 1958.—28 June 1962)

Article 7 of decree No. 1409 forbade the fishing of shrimps by any vessels not flying the Colombian flag.

U.K. Laws, Statutes, etc. (1962)

M

8-11393

Statut. Instrum. U.K., (1454), (S.62) : 2 p.

The sea fisheries (Scotland) byelaw (No. 67) 1962.—7 May 1962

Permits, on certain conditions, the use of a trawl net for the capture of Norway lobsters in certain waters in the Firth of Forth.

U.K. Laws, Statutes, etc. (1962)

M

8-11394

Statut. Instrum. U.K., (1453), (S.61) : 2 p.

The sea fisheries (Scotland) byelaw (No. 66) 1962.—7 May 1962

Permits on certain conditions, the use of a trawl net for the capture of Norway lobsters in certain waters in the Moray Firth.

Sweden. Laws, Statutes, etc. (1962)

M

8-11395

Svensk FörfSaml., (294) : 651-2

Kungl. maj:ts kungörelse Nr 294 om undatang från förbudet mot trålfiske vid rikets västra kust.—6 juni 1962 (Royal order No. 294, granting exceptions to the prohibition of trawl fishing on the eastern coast.—6 June 1962).

Sv

South Africa, Republic of. Laws Statutes, etc. (1962)

M
8-11396

Govt Gaz., S. Afr., (367) : 22

Government notice No. 1853: amendment to regulations made under the sea fisheries act, 1940.—9 November 1962

Amends the regulations published in G.N. No. 1214 of 15 Dec. 1961, in respect of the collection of crabs, oysters, mussels and other species of bait.

France. Laws, Statutes, etc. (1962)

M
8-11397

J. off. Répub. franç., (154) : 6388-9

Décret n° 62-713 du 27 juin 1962 rendant applicables aux navires immatriculés dans les territoires d'outre-mer de la république certains décrets sur la sauvegarde de la vie humaine en mer et l'habitabilité à bord des navires de commerce, de pêche et de plaisance d'une jauge brute inférieure à 500 tonneaux (Decree No. 62-713, rendering applicable to ships registered in the overseas territories of the republic certain decrees relating to the safety of life at sea and living conditions aboard commercial, fishing and pleasure craft less than 500 gross tons.—27 June 1962)

Lists the decrees made under the act of 6 Jan. 1945 relating to the safety of life at sea and living conditions aboard commercial fishing and pleasure craft.

France. Laws, Statutes, etc. (1962)

M
8-11398

J. off. Répub. franç., (167) : 7019

Arrêté du 9 juillet 1962 normalisant le poids du poisson contenu dans les conserves (Order standardizing the weight of fish contained in preserves.—9 July 1962)

Drained weight of fish in brine, except tuna and mackerel.

France. Laws, Statutes, etc. (1962)

M
8-11399

J. off. Répub. franç., (195) : 8236

Décret n° 62-971 du 13 août 1962 complétant le décret n° 61-606 du 10 juin 1961 rendant applicables aux navires immatriculés dans les territoires d'outre-mer de la république certains décrets sur la sauvegarde de la vie humaine en mer et l'habitabilité à bord des navires de commerce, de pêche et de plaisance d'une jauge brute égale ou supérieure à 500 tonneaux (Decree No. 62-971, supplementing decree No. 61-606 of 10 June 1961, rendering applicable to ships registered in the overseas territories of the republic certain decrees relating to the safety at sea and living conditions aboard commercial, fishing and pleasure craft of 500 gross tons or more.—13 August 1962)

Adds decrees relating to medical service and to navigation.

Greece. Laws, Statutes, etc. (1962)

M
8-11400

Ephem. Kybern., (II), (309) : 2391

(Ministerial decision No. 51886/6352 granting bonuses for the destruction of dolphins.—4 August 1962). *He*

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M
8-11401

Ivory Coast. Laws, Statutes, etc. (1962)
J. off. Côte d'Ivoire, (37) : 899-900

Arrête 618 TP. FAEP. EL. du 7 juillet 1962 limitant le tonnage des chalutiers pêchant dans les eaux territoriales de la Côte d'Ivoire (Order No. 618 TP. FAEP. EL. limiting the tonnage of trawlers fishing in the territorial waters of Ivory Coast.—7 July 1962)

The sum of the trawlers fishing in the territorial waters of Ivory Coast must not exceed a tonnage equal to the sum of trawlers at present fishing in the waters of the Ivory Coast.

M
8-11402

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)
J. off. Répub. Maur., (Spec. 79) : 48-58

Convention collective du travail en République Islamique de Mauritanie. Clauses générales.—5 janvier 1962 (Collective labour contract in the Islamic Republic of Mauritania.—5 January 1962)

Applies, *inter alia*, to workers in the fish preserves and salting industries.

M
8-11403

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)
J. off. Répub. Maur., (Spec. 80-81) : 100

Loi n° 62.011 portant création d'un droit fiscal de sortie sur les poissons salés.—15 janvier 1962 (Act No. 62.011 establishing a fiscal export duty on salted fish.—15 January 1962)

Amounts to 2.5% and also applies to fish in brine and dried and smoked fish.

M
8-11404

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)
J. off. Répub. Maur., (Spec. 80-81) : 116-36

Loi N° 62.038 portant code de la marine marchande et des pêches maritimes.—20 janvier 1962 (Act No. 62.038 laying down the merchant marine and sea fisheries codes.—20 January 1962)

Extensive provisions also including sea fisheries regulations.

M
8-11405

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)
J. off. Répub. Maur., (84-85) : 278

Arrêté n° 10.111 fixant les différentes zones de navigation maritime.—16 mars 1962 (Order No. 10.111 fixing the various maritime navigation zones.—16 March 1962)

Lays down different types of fishing areas.

MISCELLANEOUS AND AUXILIARIES

M

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962) 8-11406
J. off. Répub. Maurit., (91-92) : 345

Décret n° 62.110 fixant l'étendue des eaux territoriales dans les baies.—3 mai 1962 (Decree No. 62.110 fixing the extent of the territorial waters in bays.—3 May 1962)

Fixes straight lines in respect of specific bays as named.

M

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962) 8-11407
J. off. Répub. Maurit., (91-92) : 344-5

Décret n° 62.116 fixant les parts de prises des agents habilités pour la recherche et la constatation des délits de pêches maritimes.—16 mai 1962 (Decree No. 62.116 fixing the share of fines to be allocated to the officials responsible for discovering sea fisheries offences.—16 May 1962)

In the case of imposition of fines, a 5% share is allocated to the responsible officials.

M

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962) 8-11408
J. off. Répub. Maurit., (89-90) : 322

Décret no. 62.117 portant fixation de la taxe due pour la délivrance et le renouvellement des livrets professionnels des marins.—16 mai 1962 (Decree No. 62.117 fixing the tax due for the issue and renewal of seamen's certificates.—16 May 1962)

Made under act No. 62.038 of 20 Jan. 1962 laying down the merchant marine and sea fisheries code.

M

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962) 8-11409
J. off. Répub. Maurit., (97-98) : 400

Décret n° 62.148 approuvant et rendant exécutoires les décisions prises les 12 janvier et 20 mars 1962 par le comité de l'union douanière des états de l'Afrique de l'ouest.—5 juillet 1962 (Decree No. 62.148 approving and giving effect to the decisions taken on 12 January and 20 March 1962 by the committee of the customs union of the west African states.—5 July 1962)

A large number of decisions which cover also fishing craft.

M

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962) 8-11410
J. off. Répub. Maurit., (93-94) : 375-80

Arrêté n° 10.341 relatif aux conditions d'exercice de la profession des marins mauritaniens.—13 juillet 1962 (Order No. 10.341 relative to the conditions for exercising the seamen's profession in Mauritania.—13 July 1962)

Includes fishermen.

M

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962) 8-11411
J. off. Répub. Maurît., (93-94) : 380

Arrêté n° 10.342 relatif au signalement extérieur permanent des navires en mer.—13 juillet 1962 (Order No. 10.342 relative to permanent markings to be borne on the outside of seagoing ships.—13 July 1962)

Includes fishing vessels.

M

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962) 8-11412
J. off. Répub. Maurît., (99-100) : 434

Décret n° 62.183 fixant les taxes de jaugeage des navires de jauge brute inférieure à 500 tonneaux.—17 septembre 1962 (Decree No. 62.183 fixing the measurement taxes for ships of gross tonnage of less than 500 tons.—17 September 1962)

M

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962) 8-11413
J. off. Répub., Maurît., (99-100) : 435

Décret n° 62.185 fixant les taxes de visites des navires pour la délivrance, le maintien ou le renouvellement des titres de sécurité.—17 septembre 1962 (Decree No. 62.185 fixing ship inspection taxes for the issue, continuance and renewal of safety certificates.—17 September, 1962)

Includes inspection of fishing vessels of various kinds.

M

Morocco. Laws, Statutes, etc. (1962) 8-11414
Bull. off. Emp. chérif., (2604) : 1280-1, 1314-5

Arrêté n° 212-61 du 25 juillet 1962 relatif aux conditions d'aptitude physique à remplir pour la pratique de la pêche à la nage ou pêche sous-marine (Joint order No. 212-61 relating to conditions of physical aptitude required for engaging in under-water fishing.—25 July 1962)

A medical certificate is required.

M

Norway. Laws, Statutes, etc. (1962) 8-11415
Norsk Lovtid., (23) : 438

Skriv om heving oppsynet under vårtorskefisket i Finmark.—12. juni 1962 (Note suspending control over spring cod fishing in Finmark.—12 June 1962)

M

Norway. Laws, Statutes, etc. (1962) 8-11416
Norsk Lovtid., (27) : 573-4

Resolusjon om adgang for sovjetiske fiskefartøyer til å drive fiske innenfor den norske fiskerigrense og om kontroll med dette fisket.—20. juli 1962 (Royal resolution concerning the limits of Norwegian fishing waters and control of fishing exercised therein.—20 July 1962)

Made under the act of 24 Mar. 1961 relative to Norwegian fishing limits Concerns rights granted to USSR fishing craft within 6 and 12 miles off the Norwegian coast until 31 Oct. 1970.

Peru. Laws, Statutes, etc. (1962)

M

8-11417

Peruano, (6331) : 2 p.

Resolución ministerial No. 1627 por la que se establece la revalidación de licencia para una fábrica de harina de pescado en Supe.—16 de abril de 1962 (Ministerial resolution No. 1627 revalidating a licence for a fish meal plant at Supe.—16 April 1962)

Revalidation of licence granted by ministerial resolution No. 2331 of 6 Sep. 1960.

Peru. Laws, Statutes, etc. (1962)

M

8-11418

Peruano, (6332) : 3 p.

Resolución ministerial No. 1818 por la que se otorga licencia provisional para una fábrica de harina de pescado en Supe.—26 de abril de 1962 (Ministerial resolution No. 1818 granting a provisional licence for a fish meal plant at Supe.—26 April 1962)

With a processing capacity of 15 tons of raw material per hour.

Peru. Laws, Statutes, etc. (1962)

M

8-11419

Peruano, (6308) : 1 p. (6309) : 2-3

Decreto supremo No. 110-J, en virtud de la ley No. 13,968, conteniendo el código de menores.—2 de mayo de 1963 (Supreme decree No. 110-J setting forth, under act No. 13.968, the minors' code.—2 May 1962)

Age limits are set as follows: minimum of 14 years for non-industrial agricultural labour, 15 years for industrial labour, 16 years for industrial fisheries, and 18 years for port and maritime work.

Peru. Laws, Statutes, etc. (1962)

M

8-11420

Peruano, (6378) : 2 p.

Resolución ministerial No. 2139 por la que se otorga licencia provisional para una fábrica de harina de pescado en Chancay.—11 de mayo de 1962 (Ministerial resolution No. 2139 granting a provisional licence for a fish meal plant at Chancay.—11 May 1962)

With a processing capacity of 10 tons per hour.

Peru. Laws, Statutes, etc. (1962)

M

8-11421

Peruano, (6331) : 2 p.

Resolución ministerial No. 2219 concediendo una licencia provisional para una fábrica de harina de pescado en Végueta.—15 de mayo de 1962 (Ministerial resolution No. 2219 granting a provisional licence for a fish meal plant at Végueta.—15 May 1962)

With a producing capacity of 6 tons per hour.

M

Peru. Laws, Statutes, etc. (1962)

8-11422

Peruano, (6342) : 3 p.

Resolución ministerial No. 2217 por la que se concede licencia provisional para fábrica de harina de pescado en Carquín.—15 de mayo de 1962 (Ministerial resolution No. 2217 granting a provisional licence for a fish meal plant at Carquín.—15 May 1962)

With a producing capacity of $2\frac{1}{2}$ tons of meal per hour.

M

Peru. Laws, Statutes, etc. (1962)

8-11423

Peruano, (6378) : 2 p.

Resolución ministerial No. 2218 por la que se concede licencia provisional para fábrica de harina de pescado en Chancay.—15 de mayo de 1962 (Ministerial resolution No. 2218 granting a provisional licence for a fish meal plant at Chancay.—15 May 1962)

With a processing capacity of 30 tons per hour.

M

Peru. Laws, Statutes, etc. (1962)

8-11424

Peruano, (6331) : 2 p.

Resolución ministerial No. 2321 por la que se provee la construcción de una cámara isotérmica para el servicio de pesquería.—18 de mayo de 1962 (Ministerial resolution No. 2321 providing for the construction of an isothermal (constant temperature) chamber for the fisheries service.—18 May 1962)

Capacity of 17.08 cubic meters.

M

Peru. Laws, Statutes, etc. (1962)

8-11425

Peruano, (6342) : 1 p.

Ley No. 14084 por la que se establecen disposiciones para el control de los establecimientos de productos químicos o que fabriquen harina de pescado que contaminen el ambiente.—28 de mayo de 1962 (Act No. 14084 containing provisions for the control of establishments producing chemical products and manufacturing fish meal which contaminate the surrounding atmosphere.—28 May 1962)

Prescribes functions of the technical commission for the control of noxious emanations and wastes.

M

Peru. Laws, Statutes, etc. (1962)

8-11426

Peruano, (6348) : 2 p.

Resolución ministerial No. 2423 por la que se otorga licencia provisional para instalar una fábrica de harina de pescado en la zona de Ite.—28 de mayo de 1962 (Ministerial resolution granting a provisional licence to set up a fish meal plant in the Ite area.—28 May 1962)

With a processing capacity of 30 tons of raw material per hour.

MISCELLANEOUS AND AUXILIARIES

M
8-11427

Peru. Laws, Statutes, etc. (1962)
Peruano, (6335) : 1 p.

Resolución ministerial No. DC-1302 por la que se fija el salario básico para los tripulantes de los buques de la Compañía Ballenera del Norte.—2 de junio de 1962 (Ministerial resolution No. DC-1302 fixing the basic wages for the crews of the ships of the Compañía Ballenera del Norte.—2 June 1962)

Covers three categories of wage earners on whaling ships.

M
8-11428

Peru. Laws, Statutes, etc. (1962)
Peruano, (6356) : 2 p.

Resolución ministerial No. 2563 por la que se otorga licencia provisional para fábrica de harina de pescado en Végueta.—4 de junio de 1962 (Ministerial resolution No. 2563 granting a provisional licence for a fish meal plant at Végueta.—4 June 1962)

With a processing capacity of 30 tons per hour.

M
8-11429

Peru. Laws, Statutes, etc. (1962)
Peruano, (6356) : 2 p.

Resolución ministerial No. 2593 por la que se otorga licencia provisional para fábrica de harina de pescado en Carquín.—6 de junio de 1962 (Ministerial resolution No. 2593 granting a provisional licence for a fish meal plant at Carquín.—6 June 1962)

With a processing capacity of 6½ tons per hour.

M
8-11430

Peru. Laws, Statutes, etc. (1962)
Peruano, (6354) : 2 p.

Resolución ministerial No. 2643 autorizando al sindicato de inversiones Rímac, a utilizar licencia provisional para una fábrica de harina de pescado en Supe.—8 de junio de 1962 (Ministerial resolution No. 2643 authorizing the Rímac investment syndicate to use a provisional licence for a fish meal plant at Supe.—8 June 1962)

Transfer of authorization granted by ministerial resolution No. 1627 of 16 April 1962.

M
8-11431

Peru. Laws, Statutes, etc. (1962)
Peruano, (6378) : 2 p.

Resolución ministerial No. 2875 por la que se autoriza a la compañía pesquera La Gaviota a instalar fábrica de harina de pescado en Chancay.—25 de junio de 1962 (Ministerial resolution No. 2875 authorizing the fishing company La Gaviota to set up a fish meal plant at Chancay.—25 June 1962)

Transfer of authorization given by ministerial resolution No. 1400 of 4 April 1962.

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M

Peru. Laws, Statutes, etc. (1962)

8-11432

Peruano, (6366) : 2 p.

Resolución ministerial No. 1043 por la que se establece que corresponde a la sociedad nacional de pesquería retirar los residuos de pescado del terminal marítimo.—28 de junio de 1962 (Ministerial resolution No. 1043 providing that it shall be the responsibility of the national fisheries society to dispose of fish waste from the marine terminal.—28 June 1962)

Applies to fish meal waste and excess sacks and consignments of fish meal for export from the port of Callao so that the Callao committee of the national fisheries society may distribute them to producers.

M

Peru. Laws, Statutes, etc. (1962)

8-11433

Peruano, (6393) : 3 p.

Resolución ministerial No. 3746 por la que se autoriza la caza beneficio de ballenas en el litoral de Tacna.—16 de julio de 1962 (Ministerial resolution No. 3746 authorizing commercial whaling activities off the coast of Tacna.—16 July 1962)

Authorizes the establishment of a land station.

M

Peru. Laws, Statutes, etc. (1962)

8-11434

Peruano, (6388) : 2 p.

Resolución ministerial No. 3886 por la que se amplían a las zonas pesqueras de litoral los efectos de la resolución ministerial de 13 de mayo de 1958.—26 de julio de 1962 (Ministerial resolution No. 3886 extending the provisions of the ministerial resolution of 13 May 1958 to coastal fishing areas.—26 July 1962)

The minimum size of fan-shaped shells that may be caught is four and a half centimetres.

M

Peru. Laws, Statutes, etc. (1962)

8-11435

Peruano, (6389) : 3 p.

Información oficial que contiene la aceptación de la convención internacional de seguridad de la vida humana en el mar.—7 de agosto de 1962 (Official communiqué containing acceptance of the international convention for the safety of life at sea.—7 August 1962)

As signed in London on 17 Jun. 1960.

M

Peru. Laws, Statutes, etc. (1962)

8-11436

Peruano, (6426) : 2 p.

Resolución ministerial No. 4038 por la que se autoriza al consorcio ballenero a instalar una estación terrestre en Puerto Morín.—10 de agosto de 1962 (Ministerial resolution No. 4038 authorizing the whaling consortium to set up a shore station at Puerto Morín.—10 August 1962)

MISCELLANEOUS AND AUXILIARIES

Peru. Laws, Statutes, etc. (1962) M
8-11437
Peruano, (6426) : 2 p.

Resolución ministerial No. 4209 por la que se otorga licencia provisional para una fábrica de harina de pescado en Supe.—13 de agosto de 1962 (Ministerial resolution No. 4209 granting a provisional licence for a fish meal plant at Supe.—13 August 1962)

With a producing capacity of 12 tons of meal per hour.

Peru. Laws, Statutes, etc. (1962) M
8-11438
Peruano, (6416) : 2 p.

Resolución ministerial No. 4208 por la que se otorga licencia provisional para una fábrica de harina de pescado en Tambo de Mora.—13 de agosto de 1962 (Ministerial resolution No. 4208 granting a provisional licence for a fish meal plant at Tambo de Mora.—13 August 1962)

With a producing capacity of 6 tons of meal per hour.

Peru. Laws, Statutes, etc. (1962) M
8-11439
Peruano, (6404) : 2 p.

Resolución suprema No. 150-DAP por la que se confirma la tasa e la harina de pescado o similares que se embarque por los muelles fiscales.—20 de agosto de 1962 (Supreme resolution No. 150-DAP confirming the tax on fish meal and similar products embarked from government owned wharves.—20 August 1962)

20 soles (gold) per ton.

Peru. Laws, Statutes, etc. (1962) M
8-11440
Peruano, (6400) : 1 p.

Decreto ley No. 14195 por el que se establecen disposiciones referentes a la inscripción y funcionamiento de las fábricas de harina de pescado.—28 de agosto de 1962 (Decree law No. 14195 laying down provisions relative to the registration and operation of fish meal plants.—28 August 1962)

Detailed provisions designed to expedite formalities.

Peru. Laws, Statutes, etc. (1962) M
8-11441
Peruano, (6414) : 3 p.

Resolución ministerial No. 1163 por el que se establecen requisitos para el otorgamiento de licencias de instalación de fábricas de harina de pescado.—4 de septiembre de 1962 (Ministerial resolution No. 1163 laying down requirements for the granting of licences for fish meal plants.—4 September 1962)

Provisions made under the various acts and decrees governing the subject.

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- New South Wales. Laws, Statutes, etc. (1962)** MF
8-11442
Govt Gaz. N.S.W., (79) : 2465
Amendment of a new regulation made under the fisheries and oyster farms act, 1935-1960.—15 August 1962

Insertion of a new regulation (No. 160) to restrict the taking of Murray cod and golden perch (callop or yellowbelly).

- New South Wales. Laws, Statutes, etc. (1962)** MF
8-11443
Govt Gaz., N.S.W., (100) : 2997-3003
Amendment of regulations made under the radioactive substances act, 1957.—19 October 1962

Relates to protection of water against pollution by radioactive wastes.

- Queensland. Laws, Statutes, etc. (1962)** MF
8-11444
Qd Govt Gaz., 211 (11) : 284
Order in council, made under the fisheries acts, 1957 to 1959.—20 September 1962

Prohibits the taking of fish by any net in the waters specified, except the taking of herrings, hardiheads, or prawns by means of a cast or "umbrella" net.

- Western Australia. Laws, Statutes, etc. (1962)** MF
8-11445
Govt Gaz., W. Aust., (65) : 2272
Proclamation F.D. 181/62, Ex. Co. No. 1599 made under the fisheries act, 1905-1961.—10 August 1962

Prohibits the taking of prawns by means of 'trawl nets', in the waters specified, from 1 Jan. to 30 Dec. in every year.

- Canada. Laws, Statutes, etc. (1962)** MF
8-11446
Can. Gaz. (II), (19) : 1039
SOR/62-365. Order in council P.C. 1962-1034, amending the British Columbia fishery regulations made under the fisheries act.—19 September 1962

Revokes provision respecting salmon fishing in part of the Fraser River.

- Canada. Laws, Statutes, etc. (1962)** MF
8-11447
Can. Gaz. (II), (19) : 1087
DORS/62-365. Décret C.P. 1962-1034, modifiant le règlement de pêche de la Colombie-Britannique en vertu de la loi sur les pêcheries.—19 septembre 1962 (SOR/62-365. Order in council P.C. 1962-1034, amending the British Columbia fishery regulations made under the fisheries act.—19 September 1962)

Fr 8-11446.

Canada. Laws, Statutes, etc. (1962) MF
8-11448
Can. Gaz. (II), (19) : 1047

SOR/62-369. Order in council P.C. 1962-1344, amending the Ontario fishery regulations made under the fisheries act.—27 September 1962

Adds a section providing that any fishing quota fixed by the regulations may be varied by order of minister of lands and forests and a section respecting trout fishing in Lake Superior.

Canada. Laws, Statutes, etc. (1962) MF
8-11449
Can. Gaz. (II), (19) : 1096

DORS/62-369. Décret C.P. 1962-1344 modifiant le règlement de pêche de l'Ontario en vertu de la loi sur les pêcheries.—27 septembre 1962 (SOR/62-369. Order in council P.C. 1962-1344, amending the Ontario fishery regulations made under the fisheries act.—27 September 1962)

Fr 8-11448.

Newfoundland. Laws, Statutes, etc. (1962) MF
8-11450
Statut. Newfoundld, 1961-1962, (1-82) : 260-1

No. 45. The supply act, 1962: an act for granting to Her Majesty certain sums of money for defraying certain expenses of the public service for the financial year ending the thirty-first of March 1963 and for the other purposes relating to the public service.—20 March 1962

Includes appropriations for agriculture and fisheries.

Ontario. Laws, Statutes, etc. (1961) MF
8-11451
Statut. Ont., 10-11 Elizabeth II, 1961-1962, Chap. 45, 161

The fish inspection amendment act, 1961-62: an act to amend the fish inspection act.—15 December 1961

Expands section 13 on power of lieutenant governor in council to make regulations.

Ontario. Laws, Statutes, etc. (1962) MF
8-11452
Statut. Ont., 10-11 Elizabeth II, 1961-1962, Chap. 48, 167-91
The game and fish act, 1961-62.—30 March 1962

Detailed provisions, including regulations on traffic in certain fish, fishing nets, setting apart of waters for the propagation of fish, and fishing rights.

Ontario. Laws, Statutes, etc. (1962) MF
8-11453
Statut. Ont., 10-11 Elizabeth II, 1961-1962, Chap. 99, 593-601

The Ontario water resources commission amendment act, 1961-62: an act to amend the Ontario water resources commission act.—30 March 1962

Numerous amendments regarding municipal powers, prohibition of discharge of polluting material, regulation of addition of substances to water, sewage works, etc.

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- Finland. Laws, Statutes, etc. (1962)** MF
8-11454
Finl. FörfattnSaml., (282-9) : 541-56
N:o 282. Vattenförfordning.—6 april 1962 (Decree No. 282: waters decree.—6 April 1962). *Sv*

Made under the waters act of 1961. Contains provisions in respect of water pollution.

- Finland. Laws, Statutes, etc. (1962)** MF
8-11455
Finl. FörfattnSaml., (282-9) : 557-9
Förordning N:o 283 om förhandsåtgärder för skydd av vatten.—6 april 1962 (Decree No. 283 concerning prior measures to be taken for the protection of water.—6 April 1962). *Sv*

Made under the waters act of 1961. Control of pollution by certain objectionable establishments.

- France. Laws, Statutes, etc. (1962)** MF
8-11456
J. off. Répub. franc., (50) : 2020-57
Décret n° 62-214 du 28 février 1962 modifiant les tarifs des droits de douane d'importation et le tarif des droits de douane d'exportation (Decree No. 62-214, amending the import and export duty tariffs.—28 February 1962)

Extensive amendments, also covering fish and fish products.

- France. Laws, Statutes, etc. (1962)** MF
8-11457
J. off. Répub. franç., (62) : 2751-2
Arrêté du 2 mars 1962 fixant les mesures spéciales de protection pour le saumon (Order laying down special measures for the protection of salmon.—2 March 1962)

Prohibits taking salmon and, where applicable, trout in certain waters.

- France. Laws, Statutes, etc. (1962)** MF
8-11458
J. off. Répub. franç., (71) : 3174-87
Arrêté du 7 mars 1962 relatif à la nomenclature, aux conditions d'installation et de conservation des médicaments, objets de pansement, appareils, matériel médical, ustensiles, désinfectants, à embarquer sur les navires de commerce, de pêche et de plaisance (Order relative to the nomenclature and conditions of installation and preservation of medicines, bandages, equipment, medical material, utensils and disinfectants to be carried aboard freight, fishing and pleasure craft.—7 March 1962)

- Germany, Eastern. Laws, Statutes, etc. (1962)** MF
8-11459
GesBl. dtsh. dem. Repub. (2), (71) : 635-6
Fünfte Durchführungsbestimmung zum Gesetz über die Versicherung der volkseigenen Betriebe.—19. September 1962 (Fifth ordinance implementing the act relative to the insurance of the people's concerns.—19 September 1962)

Including fishery concerns.

Germany. Federal Republic. Laws, Statutes, etc. (1962)

MF
8-11460

MinistBl. Germ. fed. Rep., (18) : 262

Bekanntmachung. Änderung der Richtlinien für die Gewährung einer Preishilfe für Gasöl für die Grosse Herings, Grosse Hochsee, Kleine Hochsee-, Küsten- und Binnenfischerei. Vom. 10. August 1962 (Notice relating to amendment of the directives for the granting of a price subsidy for fuel for high seas fisheries, large-scale herring fisheries, small-scale high seas fisheries, and coastal and inland fisheries.—10 August 1962)

Miscellaneous amendments to directives of 4 May 1962.

Germany. Federal Republic. Laws, Statutes, etc. (1962)

MF
8-11461

MinistBl. Germ. fed. Rep., (20) : 294-7

Gesetz zu dem Überinkommen Nr. 112 der Internationalen Arbeitsorganisation vom 19. Juni 1959 über das Mindestalter für die Zulassung zur Arbeit in der Fischerei.—24. September 1962 (Act relative to convention No. 112 of the International Labour Organization concerning the minimum age for admission to employment as fishermen.—24 September 1962)

Ratification of convention adopted at Geneva on 19 Jun. 1959.

Madagascar. Laws, Statutes, etc. (1962)

MF
8-11462

J. off. Répub. malgache, (Spec. 248) : 2265

Ordonnance N° 62-085 portant modification de l'ordonnance n° 60-128 du 3 octobre 1960 fixant la procédure applicable à la répression des infractions à la législation forestière, de la chasse, de la pêche et de la protection de la nature.—29 septembre 1962 (Ordinance No. 62-085 amending ordinance No. 60-128, of 3 October 1960, fixing the procedure applicable for the penalization of violations of legislation relative to hunting, fishing and protection of nature.—29 September 1962)

Ci 61-05843. Various administrative amendments.

Malaya, Federation of. Laws, Statutes, etc. (1962)

MF
8-11463

Fed. Malaya Gaz., (18), (Leg. Suppl. 41) : 277-8

L.N. 221. Prohibition of set barrier fishing gear (Perak) rules, 1962, made under the fisheries enactment, 1937.—28 July 1962

Prohibits in the tidal waters of the State of Perak the use of fishing gear consisting of a screen of nettings or any other description of material supported at intervals by poles.

Norway. Laws, Statutes, etc. (1962)

MF
8-11464

Norsk Lovtid., (5) : 49

Bestemmelse om utvidelse av maskevidden i trål.—26. januar 1962 (Notice concerning an increase in fish net meshes.—26 January 1962). No

In respect of nets of polyethylene.

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- Norway. Laws, Statutes, etc. (1962)** MF
8-11465
Norsk Lovtid., (5) : 50

Bestemmelse om merking av bundne redskaper til lakse-eller sjøaurefiske i Vardø fiskeridistrikt.—29. januar 1962 (Notice concerning the marking of fixed installations for salmon or sea-trout fishing in the Vardø fishing district.—29 January 1962). *No*

- Norway. Laws, Statutes, etc. (1962)** MF
8-11466
Norsk Lovtid., (12) : 198

Resolusjon om bestemmelser om snurpenotfisket etter størje.—23. mars 1962 (Resolution containing provisions concerning slip-net sturgeon fishing.—23 March 1962). *No*

In respect of rights of catch.

- Norway. Laws, Statutes, etc. (1962)** MF
8-11467
Norsk Lovtid., (23) : 439

Lov Nr. 1 om opphevelse av Fisketiendefondet.—15. juni 1962 (Act No. 1, abolishing the fishing titles fund.—15 June 1962). *No*

Repeals acts of 20 Sep. 1845, 5 Aug. 1848, 27 Dec. 1862 and 4 May 1872 concerning payment of fishing titles.

- Norway. Laws, Statutes, etc. (1962)** MF
8-11468
Norsk Lovtid., (23) : 440-2

Bestemmelse om utførsel og betaling av eksportfrilistevarer.—15. juni 1962 (Provisions concerning the export and payment of products on the free export list.—15 June 1962). *No*

Covers fish and fish products.

- Peru. Laws, Statutes, etc. (1962)** MF
8-11469
Peruano, (6333) : 1 p.

Resolución ministerial No. 2362 por la que se amplía a 30 días el plazo para tramitación de certificados de departamento de tecnología pesquera.—22 de mayo de 1962 (Ministerial resolution No. 2362 extending to 30 days the period allowed for the procedure for obtaining certificates from the department of fisheries and technology.—22 May 1962)

Refers to certificates provided for in ministerial resolution No. 1470 of 6 Apr. 1962.

- Peru. Laws, Statutes, etc. (1962)** MF
8-11470
Peruano, (6351) : 2 p.

Resolución ministerial No. 2426 por la que se revalida licencia provisional para fabrica de harina de pescado en la Caleta de Végueta.—28 de mayo de 1962 (Ministerial resolution No. 2426 revalidating a provisional licence for a fish meal plant in the Caleta de Végueta.—28 May 1962)

Peru. Laws, Statutes, etc. (1962)

MF
8-11471

Peruano, (6340) : 2 p.

Resolución ministerial No. 2562, por la que se otorga una licencia provisional para fábrica de harina de pescado en Chancay.—4 de junio de 1962 (Ministerial resolution No. 2562 granting a provisional licence for a fish meal plant at Chancay.—4 June 1962)

Capacity 4 tons per hour.

Peru. Laws, Statutes, etc. (1962)

MF
8-11472

Peruano, (6352) : 2 p.

Resolución suprema No. 286 por la que se otorga una licencia definitiva a la Industria Conservera Alimenticia para producir harina de pescado.—9 de junio de 1962 (Supreme resolution No. 286 granting a permanent licence to the Industria Conservera Alimenticia for the production of fish meal.—9 June 1962)

Portugal. Laws, Statutes, etc. (1962)

MF
8-11473

Diário do Gov., Lisboa, 1 (144) : 873-8

Decreto-lei n.º 44 418: fixa os direitos de importação a aplicar, a partir de 6 de maio de 1962, a determinadas mercadorias quando originárias dos países que beneficiam da cláusula de nação mais favorecida.—26 de junho de 1962 (Decree law No. 44 418 fixing the import duties to be applied with effect from 6 May 1962 to certain goods imported from countries benefiting from the most favoured nation clause.—26 June 1962). *Pr*

Includes fish and fish products.

Sweden. Laws, Statutes, etc. (1962)

MF
8-11474

Svensk FörfSaml., (126-8) : 303

Kungl. Maj:ts förordning Nr 126 angående fortsatt giltighet av förordning den 30 maj 1952 (nr 320) om viss reglering av handeln med fisk, m.m.—27 april 1962 (Royal decree No. 126, extending the validity of decree No. 320 of 30 May 1952, regulating trade in fish, etc.—27 April 1962). *Sv*

Until 30 Jun. 1963.

Sweden. Laws, Statutes, etc. (1962)

MF
8-11475

Svensk FörfSaml., (126-8) : 303-4

Kungl. Maj:ts förordning/Nr 127 om fortsatt giltighet av förordningen den 5 juni 1953 (nr 372) angående reglering av införseln av vissa slag av fisk och skaldjur.—27 april 1962 (Royal decree No. 127, extending the validity of decree No. 372 of 5 June 1953, regulating the importation of certain species of fish and crustaceans.—27 April 1962). *Sv*

Until 30 Jun. 1963.

Sweden. Laws, Statutes, etc. (1962)MF
8-11476*Svensk FörfSaml.*, (126-8) : 304

Kungl. Maj:ts förordning Nr 128 om fortsatt giltighet av förordningen den 5 juni 1953 (nr 374) angående reglering av utförseln av vissa slag av fisk och skaldjur m.m.—27 april 1962 (Royal decree No. 128, extending the validity of decree No. 374 of 5 June 1953, regulating the exportation of certain species of fish and crustaceans, etc.—27 April 1962). *Sv*

Until 30 Jun. 1963.

Switzerland. Laws, Statutes, etc. (1962)MF
8-11477*Rec. Lois féd., Berne*, (40) : 1230-56

Ordonnance N° 6 concernant l'Association européenne de libre-échange (ordonnance AELE N° 6).—5 octobre 1962 (ordinance No. 6 relative to the European Free Trade Association (ordinance EFTA No. 6).—5 October 1962)

Covers fish and fish products.

Turkey. Laws, Statutes, etc. (1962)MF
8-11478*Resmî Gaz.*, (11085) : 7142

Bahk avciliğinin tanzimine dair 11 numarah sirküler (Circular No. 11 of the ministry of trade, regulating fishing.—Undated). *Tü*

Provides for closed seasons during the period 15 April 1962-15 April 1963.

U.K. Laws, Statutes, etc. (1962)MF
8-11479*Statut. Instrum. U.K.*, (1669) : 2 p.

The salmon and migratory trout (prohibition of drift-net fishing) order 1962.—4 July 1962

Prohibition from 15 Sep. 1962 to 15 Feb. 1965 off the coast of Scotland and the Tweed.

Brun, B. (1963)MF
8-11480*C.R. Acad. Sci., Paris*, 256 (13) : 2934-5

Sur les gammares du groupe *G. locusta* des eaux marines et saumâtres du littoral provençal (On the sand flies of the group *G. locusta* in the marine and brackish waters of the Provençal coast)

Preliminary note; three forms of the group *locusta*, different from the forms identified on the Atlantic coast, are discussed.

Legrand, J.-J. & P. Juchault (1963)

MF

C.R. Acad. Sci., Paris, 256 (13) : 2931-3

8-11481

Mise en évidence d'un hermaphrodisme protogynique fonctionnel chez l'isopode anthuridé *Cyathura carinata* (Kröyer) et étude du mécanisme de l'inversion sexuelle (Demonstration of a functional protogynic hermaphroditism in the anthurid isopod *Cyathura carinata* (Kröyer) and study of the mechanism of the sexual inversion)

Preliminary account of observations on material collected from the French Atlantic and Mediterranean coasts.

New South Wales. Laws, Statutes, etc. (1962)

MF

Govt Gaz., N.S.W., (115) : 3371

8-11482

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of waters of Richmond River, county of Rous.—31 October 1962

Prohibits the taking of fish by means of nets of every description, in the specified tidal waters, from 29 Oct. 1962 to 28 Oct. 1967.

Queensland. Laws, Statutes, etc. (1962)

MF

Qd Statut., 1960-61, 9-10 Elizabeth II, Ed. 1962, 151-68

8-11483

No. 29. The pollution of waters by oil of 1960: an act relating to the prevention of the pollution of the territorial waters and inland navigable waters of Queensland by oil.—12 December 1960

Canada. Laws, Statutes, etc. (1962)

MF

Can. Gaz. (II), (20) : 1125

8-11484

SOR/62-399. Prince Edward Island fish propagation order, made under the fisheries act.—26 September 1962

Concerns the area known as the 'Cooper bed' and part of Bideford River.

Canada. Laws, Statutes, etc. (1962)

MF

Can. Gaz. (II), (20) : 1176

8-11485

DORS/62-399. Ordonnance relative à la propagation du poisson dans l'Île-du-Prince-Édouard, en vertu de la loi sur les pêcheries.—26 septembre 1962 (SOR/62-399. Prince Edward Island fish propagation order, made under the fisheries act.—26 September 1962)

Fr 8-11484.

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Canada. Laws, Statutes, etc. (1962)

MF
8-11486

Can. Gaz. (II), (23) : 1239-40

SOR/62-452. Order in council P.C. 1962-1651 amending the fish inspection regulations made under the fish inspection act.—22 November 1962

Amendments in respect of powers of inspectors, disposition of fish that are considered to be unsuitable for sale, use of the designations 'Canada inspected' and 'processed under government supervision'. A paragraph is added to section 60 to the effect that fish sticks shall not be prepared from comminuted fish flesh.

Canada. Laws, Statutes, etc. (1962)

MF
8-11487

Can. Gaz. (II), (23) : 1295-6

DORS/62-452. Décret C.P. 1962-1651 modifiant le règlement sur l'inspection du poisson en vertu de la loi sur l'inspection du poisson.—22 novembre 1962 (SOR/62-452. Order in council P.C. 1962-1651 amending the fish inspection regulations made under the fish inspection act.—22 November 1962)

Fr 8-11486.

Chile. Laws, Statutes, etc. (1962)

MF
8-11488

Diario ofic., Santiago, (25.350) : 2502

Decreto Núm. 415 por el que se autoriza a la sociedad Alsina y Pita, Compañía Industrial Pesquera Antofagasta (CIPA) para instalar una fábrica de harina y aceite de pescado y de conservas en Tocopilla.—2 de agosto de 1962 (Decree No. 415 authorizing the Sociedad Alsina y Pita, Compañía Industrial Pesquera Antofagasta (CIPA) to set up a fish meal and oil conserves plant at Tocopilla.—2 August 1962)

Denmark. Laws, Statutes, etc. (1962)

MF
8-11489

Lovtidende A, (22) : 884-7

Bekendtgørelse Nr. 282 om udførsel af fisk og fiskevarer.—8. august 1962 (Notification No. 282, concerning the export of fish and fisheries products.—8 August 1962). *Da*

Ci 60-5806. Repeals and replaces notification No. 280 of 2 Sep. 1959.

Finland. Laws, Statutes, etc. (1962)

MF
8-11490

Finl. FörfattnSaml., (39-54) : 89

Lag N:o 39 om användning av medel, som influtit av vissa laxtionden.—12 januari 1962 (Act No. 39, concerning the utilization of certain salmon fishing titles.—12 January 1962). *Sv*

Concerns joint salmon fishing practised by Finland and Sweden in the Tornio and Muonio Rivers. Titles formerly distributed among clergymen of areas concerned; now to be divided among owners of the water.

Switzerland. Laws, Statutes, etc. (1961) MF
8-11491
Rec. Lois. féd., Berne, (48) : 1517-20

Accord commercial du 2 décembre 1961 entre la Confédération Suisse et la République Tunisienne (Trade agreement between the Swiss Confederation and the Tunisian Republic.—2 December 1961)

Valid until 31 Dec. 1964. Imports from Tunisia include fresh and preserved fish, crustaceans.

Sweden. Laws, Statutes, etc. (1962) MF
8-11492
Svensk FörfSaml., (303-8) : 677-8

Kungl. maj:ts Förordning Nr 308 om förhöjning av vissa livräntor på grund av statsunderstödd olycksfallsförsäkring för fiskare.—6 juni 1962 (Royal decree No. 308, increasing certain lifetime pensions based on the state subsidy for fishermen in case of accidents.—6 June 1962). *Sv*

Portugal. Laws, Statutes, etc. (1962) MF
8-11493
Bol. ofic. Cabo Verde, (39) : 879-80

Decreto-lei n.º 44 523: organiza os serviços do instituto das indústrias de pesca de Angola e do fundo de apoio às indústrias de pesca.—18 de agosto de 1962 (Decree No. 44 523 organizing the services of the Angola fisheries industries institute and the fisheries institute support fund.—18 August 1962). *Sv*

Prescribes in an annex the establishment of said institute.

Portugal. Laws, Statutes, etc. (1962) MF
8-11494
Bol. ofic. Cabo Verde, (39) : 876-7

Decreto-lei n.º 44 508: Designa as mercadorias provenientes das províncias ultramarinas que são livres, a partir de 1 de janeiro de 1963, de direitos aduaneiros de importação no continente e ilhas adjacentes.—14 de agosto de 1962 (Decree No. 44 508 specifying the goods from the overseas provinces which with effect from 1 January 1963 shall be free of customs import duties upon entry into continental Portugal and the adjacent islands.—14 August 1962). *Pr*

Includes fisheries products.

Foyle Fisheries Commission (1962?) MF
8-11495
Rep. Foyle Fish. Comm., 10 : 47 p.

Includes a general account of the commission, activities of the advisory council, staff and finances. Describes 'conservancy', state of the fishery, rainfall and river conditions, netting, angling, research work, predator control, hatchery and restocking, drainage, engineering works, water pollution and enforcement. Describes 'management' (Londonderry fishery, licences, and permits, catch statistics, rod returns). All with respect to *Salmo salar*. Appendices include trading accounts, list of staff and licence distributors, abstracts of regulations as well as a geographical illustration of catches in the river Foyle, 1960-61 and three separately signed articles: Notes on experimental fishing in the river Foyle during the period 1 Sep. to 19 Dec. 1960 by Cummins, N. P.; Notes on conditions affecting salmon fishing and the runs of fish in the river Foyle during 1955 and 1959 by Cummins, N. P.; Investigation into the Mourne stocks of salmon, 1961 by Vickers, K. U.

IPSFC (1962)MF
8-11496*Rep. int. Pacif. Salm. Fish. Comm.*, 1961 : 43 p.

Report of the Commission's meetings, recommendations for regulations governing the fisheries for sockeye and pink salmon, in 1961, account of the conditions of the fisheries in this year, with statistics of catch and escapement.

Ireland. Inland Fisheries TrustMF
8-11497

Dublin, 19 p.

Angling development and exploitation

A popular written handbook with specific reference to Ireland discussing: basic requirements, types of angling, species of game and coarse fish, sea angling, exploitation and publicities.

Howe, H. V. (1962)MF
8-11498

366 p.

Ostracod taxonomy

A reference book for ostracod workers, both paleontologists and neontologists. A complete guide to all major classifications of Ostracoda. Contains 1936 entries and extensive bibliography.

Finland. Laws, Statutes, etc. (1962)MF
8-11499*Finl. FörfattnSaml.*, (89-93) : 159-60

Statsrådets beslut N:o 93 om en delegation för vattenskydd.—25 januari 1962 (Resolution No. 93 of the council of state, concerning the water protection commission.—25 January 1962). *Sv*

Ci 60-1327. Creates commission for the protection of sea and inland waters; repeals and replaces order No. 433 of 16 Oct. 1958 as amended by order No. 162 of 25 Mar. 1959, creating a temporary commission.

Finland. Laws, Statutes, etc. (1962)MF
8-11500*Finl. FörfattnSaml.*, (222-7) : 428

Lantbruksministeriets beslut N:o 227 om förbud mot fiske i vissa vatten.—13 mars 1962 (Resolution No. 227, prohibiting fishing in certain waters.—13 March 1962). *Sv*

Until 1966.

Finland. Laws, Statutes, etc. (1962)MF
8-11501*Finl. FörfattnSaml.*, (363-7) : 716

Lantbruksministeriets beslut N:o 367 angående ändring av lantbruksministeriets beslut om inskränkning av fisket i vissa vatten.—28 juni 1962 (Resolution No. 367, amending the resolution restricting fishing in certain waters.—28 June 1962). *Sv*

Minor amendment to resolution of 3 Jul. 1961, in respect of fishing methods.

MISCELLANEOUS AND AUXILIARIES

France. Laws, Statutes, etc. (1962) MF
8-11502
J. off. Répub. franç., (169) : 7128

Décret n° 62-813 du 16 juillet 1962 portant règlement d'administration publique pour l'application de l'article 439-2 du code rural (Decree No. 62-813, issuing regulations for the application of art. 439-2 of the rural code.—16 July 1962)

Penalties for sale of illicitly-taken fish.

Finland. Laws, Statutes, etc. (1962) MF
8-11503
Finl FörfattnSaml., (399-410) : 812

Förordning N:o 405 ändring av förordningen angående verkställighet och tillämpning av lagen om fiske.—27 juli 1962 (Decree No. 405, amending the decree providing for implementation of the fishing act.—27 July 1962). *Sv*

Minor amendment on taxes.

France. Laws, Statutes, etc. (1962) MF
8-11504
J. off. Répub. franç., (200) : 8378

Arrêté du 18 août 1962 portant institution et fixant la composition d'un comité consultatif de la distribution des produits de la mer et d'eau douce aux stades de gros, demi-gros et détail (Order creating and establishing the composition of an advisory committee in the wholesale, semi-wholesale and retail distribution of marine and freshwater products.—18 August 1962)

Prescribes composition and functions of said committee, which is established within the secretariat of state for internal trade.

Gabon. Laws, Statutes, etc. (1962) MF
8-11505
J. off. Rép. gabon., (26) : 803-4

Loi n° 22/62 du 26 octobre 1962 ratifiant l'accord de coopération entre l'état d'Israël et la République Gabonaise signé le 15 mai 1962 (Act No. 22/62 ratifying the agreement on technical co-operation between the state of Israel and the republic of Gabon.—26 October 1962)

Technical assistance and trade agreement. Imports include canned fish.

Guatemala. Laws, Statutes, etc. (1962) MF
8-11506
Guatemalteco, (53) : 625-6

Reglamento para la aplicación de la ley sobre explotación en forma racional, de los recursos pesqueros del país.—16 de agosto de 1962 (Regulations for the application of the act on the rational exploitation of the fishing resources of the country.—16 August 1962)

Detailed provisions concerning the granting of commercial fishing licences, the maximum number of fishing craft authorized to fish certain species, inspection, etc.

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- MF
8-11507
- Kerala. Laws, Statutes, etc.** (1962)
Kerala Gaz., (45) Pt. 1 Suppl. : G3791
 Notification G.O. (MS) No. 594 relating to Kerala fisheries service special rules.—3 November 1962

Establishes the categories of officers composing the service, their recruitment, promotions, etc.

- MF
8-11508
- Ireland. Laws, Statutes, etc.** (1962)
Statut. Instrum. Ire., (39) : 2 p.
 Live fish (restriction on import) order, 1962.—2 March 1962

Prohibits the importation of live fish (except those specified) and the eggs or young of such fish, save under licence.

- MF
8-11509
- Ireland. Laws, Statutes, etc.** (1962)
Iris Oifigiúil, (77) : 1138-9
 Castlemaine harbour mussel fisheries bye-laws No. 510, 1962, made under the fisheries (consolidation) act, 1959.—14 September 1962

Prescribed closed seasons and closed areas.

- MF
8-11510
- Ireland. Laws, Statutes, etc.** (1962)
Statut. Instrum. Ire., (216) : 1 p.
 Fisheries (amendment) act, 1962 (commencement) order, 1962.—20 December 1962

Fixes 1 Jan. 1963 and 1 Mar. 1963 as the dates on which the specified provisions of the fisheries (amendment) act, 1962, come into operation.

- MF
8-11511
- Italy. Laws, Statutes, etc.** (1962)
Gazz. uff. Repub. ital., (202) : Suppl. 1 : 4, 108

Decreto del presidente della repubblica 1° agosto 1962, n. 1118. Modificazione del regime daziario di alcuni prodotti in relazione ad analoghe variazioni intervenute nella tariffa doganale comune della Comunità Economica Europea (Presidential decree No. 1118, modifying customs status of certain products, in relation to similar modifications in the common customs tariff of the European Economic Community.—1 August 1962)

- MF
8-11512
- Jordan. Laws, Statutes, etc.** (1962)
Off. Gaz. Jordan, (1636) : 1019
 List of prices for the purchase and sale of fish

Concerns about fifty varieties.

MF
8-11513

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)
J. off. Répub. Maurit., (82-83) : 194-204

Décret n° 62.028 réorganisant le cadre de l'élevage, des pêches maritimes et des industries animales.—17 janvier 1962 (Decree No. 62.028 reorganizing the stockbreeding, sea fisheries and animal industries staff establishment.—17 January 1962)

Detailed provision repealing and replacing orders Nos. 5002 and 5006 of 21 Mar. 1959.

MF
8-11514

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)
J. off. Répub. Maurit., (87-88) : 291-5

Décret n° 62.078 fixant les modalités d'application des mesures d'exonération des droits et taxes à l'entrée prévues par la loi n° 61.122 du 26 juin 1961 déterminant le régime des investissements privés en Mauritanie.—20 mars 1962 (Decree No. 62.078 laying down the terms for the application of the exemption measures in respect of import duties and taxes provided for in act No. 61.122 of 26 June 1961 determining the private investment system in Mauritania.—20 March 1962)

Exemptions apply to various products including fish and fishing equipment.

MF
8-11515

Peru. Laws, Statutes, etc. (1962)
Peruano, (6348) : 3 p.

Resolución ministerial No. 2756 por la que se prohíbe el uso de redes agalleras en los ríos Ilave y Ramis.—15 de junio de 1962 (Ministerial resolution No. 2746 forbidding the use of gill fishing nets in the Ilave and Ramis.—15 June 1962)

Until 15 Aug. 1963.

MF
8-11516

Peru. Laws, Statutes, etc. (1962)
Peruano, (6409) : 2 p.

Decreto ley No. 14192 por el que se fijan sueldos y salarios mínimos en todas las actividades económicas.—21 de agosto de 1962 (Decree law No. 14192 fixing minimum salaries and wages in all branches of economic activity.—21 August 1962)

Figures are given in respect of the various provinces.

MF
8-11517

Peru. Laws, Statutes, etc. (1962)
Peruano, (6466) : 2 p.

Resolución ministerial No. 5315 por la que se autoriza al servicio de pesquería para hacer instalaciones de agua en la planta piloto de Mancora.—20 de octubre de 1962 (Ministerial resolution No. 5315 authorizing the fisheries service to provide water facilities in the Mancora pilot plant.—20 October 1962)

The Mancora pilot plant is for the salting, drying and smoking of fish.

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Philippines. Laws, Statutes, etc. (1962)

MF
8-11518

Off. Gaz., Manila, (39) : 6222

Provincial circular relating to cooperation of municipal and city police agencies in the present drive against rampant illegal fishing activities in Philippines waters.—29 August 1962

Particularly against the use of dynamite or explosives, detrimental not only to the aquatic resources of the nation, but also to the increased production of fish.

Philippines. Laws, Statutes, etc. (1962)

MF
8-11519

Off. Gaz., Manila, (39) : 6213-5

Executive order No. 18 intensifying the national food production campaign.—30 August 1962 (Establishes the national food production campaign committee, in view to the recurring shortage of foods, including fish)

Poland. Laws, Statutes, etc. (1962)

MF
8-11520

Dziennik Ustaw, (52); Text 252 : 435-7

Rozporządzenie rady ministrów z dnia 24 września 1962 r. w sprawie zasad określania wysokości kar pieniężnych za zanieczyszczenie wody i trybu ich ściągania (Order relative to the amount of fines payable for water pollution, and the manner of collecting such fines.—24 September 1962)

Made under the water act of 30 May 1962.

New South Wales. Laws, Statutes, etc. (1962)

MF
8-11521

Govt Gaz., N.S.W., (72) : 2238

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Brunswick River and adjacent waters of the South Pacific Ocean, County of Rous.—18 July 1962

Prohibits in the described waters the taking of fish by means of nets of every description with the exception of the bait net prescribed by regulation 26B, for a period of five years.

New South Wales. Laws, Statutes, etc. (1962)

F
8-11522

Govt Gaz., N.S.W., (79) : 2464

Amendment of regulations made under the fisheries and oyster farms act, 1935-1960.—15 August 1962

Various minor amendments of regulation 13 respecting fishing in inland waters.

New South Wales. Laws, Statutes, etc. (1962)

F
8-11523

Govt Gaz., N.S.W., (84) : 2612

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to portions of the Hunter River, counties of Brisbane, Durham, Hunter and Northumberland.—22 August, 1962

Prohibits, in the prescribed waters, the taking of fish by otter trawl nets of every description, from 1 Sep. 1962 to 31 Aug. 1967.

MISCELLANEOUS AND AUXILIARIES

New South Wales. Laws, Statutes, etc. (1962) F
8-11524
Govt Gaz. N.S.W., (84) : 2612

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the inland waters of Murray River in the vicinity of Mildura, county of Wentworth.—22 August 1962

Prohibits, in the prescribed waters, the taking of fish by all methods other than a single rod and line or handline with the number of hooks specified, from 28 Aug. 1962 to 27 Aug. 1967.

New South Wales. Laws, Statutes, etc. (1962) F
8-11525
Govt Gaz., N.S.W., (94) : 2808-9

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Darkum Creek and Woolgooga and Hearne's Lakes, county of Fitzroy.—12 September 1962

Prohibits, in the specified waters the taking of fish by nets of every description other than a 20 ft. hand-hauled net and the prescribed dip or scoop net for the capture of prawns only, from 28 Nov. 1962 to 27 Nov. 1967.

New South Wales. Laws, Statutes, etc. (1962) F
8-11526
Govt Gaz., N.S.W., (94) : 2809

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Lady Robinson's Beach, Botany Bay, county of Cumberland.—12 September 1962

Prohibits, in the prescribed waters, the taking of fish by nets of every description during week-ends and holidays, as specified in the schedule, during the years 1962 to 1966.

New South Wales. Laws, Statutes, etc. (1962) F
8-11527
Govt Gaz., N.S.W., (96) : 2877

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Nepean River and Hawkesbury River, counties of Cumberland, Camden and Cook.—19 September 1962

Prohibits, in the prescribed waters, the taking of fish by all methods, other than a single rod and line or handline with not more than two hooks attached, from 1 Jan. 1963 to 31 Dec. 1967.

New South Wales. Laws, Statutes, etc. (1962) F
8-11528
Govt Gaz., N.S.W., (96) : 2878

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of waters of Wakool River at Murray River junction, counties of Caira and Wakool.—19 September 1962

Prohibits, in the prescribed waters, the taking of fish by nets of every description, from 1 Jan. 1963 to 31 Dec. 1967.

F

New South Wales. Laws, Statutes, etc. (1962)

8-11529

Govt Gaz., N.S.W., (98) : 2936

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of canal lagoon of Berrara Creek, county of St. Vincent.—26 Sep. 1962

Prohibits, in the prescribed waters, the taking of fish by nets of every description other than the prescribed dip or scoop net and a 20 ft. hand-hauled net for the capture of prawns only, from 24 Dec. 1962 to 23 Dec. 1967.

F

Canada. Laws, Statutes, etc. (1962)

8-11530

Can. Gaz. (II), (18) : 1036-7

SOR/62-364. Alberta fish propagation order, pursuant to the fisheries act.—10 September 1962

The minister of lands and forests for the province of Alberta may set apart for the propagation of fish any of the waters described in the schedule.

F

Canada. Laws, Statutes, etc. (1962)

8-11531

Can. Gaz. (II), (18) : 1084-5

DORS/62-364. Ordonnance sur la propagation du poisson en Alberta, en vertu de la loi sur le pêcheries.—10 septembre 1962 (SOR/62-364. Alberta fish propagation order, pursuant to the fisheries act.—10 September 1962)

Fr 8-11530.

F

Tchad, Republic of. Laws, Statutes, etc. (1961)

8-11532

J. off. Tchad, 120

Loi n° 5/61 instituant une taxe de circulation sur le poisson séché et fumé.—23 février 1961 (Act No. 5/61 establishing a sales tax on dried and smoked fish.—23 February 1961)

F

Tchad, Republic of. Laws, Statutes, etc. (1961)

8-11533

J. off. Tchad, 121

Loi n° 7/61 instituant un droit de sortie sur les poissons séchés, fumés ou salés originaires de la république du Tchad.—23 février 1961 (Act No. 7/61 establishing an export tax on dried, smoked or salted fish originating in the republic of Tchad.—February 1961)

F

Tchad, Republic of. Laws, Statutes, etc. (1961)

8-11534

J. off. Tchad, (22) : 790

Décret n° 133/FP. réglementant l'inspection des produits alimentaires d'origine animale autres que les viandes.—24 juillet 1961 (Decree No. 133/FP. regulating the inspection of foodstuffs of animal origin other than meat.—24 July 1961)

Congo, Republic of, Laws, Statutes, etc. (1962) F
8-11535
J. off. Congo, (26) : 947-94

Décret n° 62-375 déterminant les conditions d'application de la loi n° 25-62 du 21 mai 1962 portant réglementation des établissements dangereux, insalubres et incommodes.—20 novembre 1962 (Decree No. 62-375 laying down conditions for the application of act No. 25-62, of 21 May 1962, regulating the operation of dangerous, unhealthful or objectionable establishments.—20 November 1962)

Costa Rica. Laws, Statutes, etc. (1962) F
8-11536
Gaceta, S. José, (186) : 2509-11

Decreto No. 3.—Reglamento de la ley de conservación de la fauna silvestre No. 2790 de 20 de julio de 1961.—13 de agosto de 1962 (Decree No. 3 containing regulations under the forest wildlife conservation act (act No. 2790) of 20 July 1961.—13 August 1962)

Includes provisions on fishing licences.

Finland. Laws, Statutes, etc. (1962) F
8-11537
Finl. FörfattnSaml., (328-33) : 652

Lantbruksministeriets beslut N:o 333 om minimimått för gös i vissa vatten.—16 maj 1962 (Resolution No. 333, concerning the minimum size of pike-perch taken in certain waters.—16 May 1962). *Sv*

Finland. Laws, Statutes, etc. (1962) F
8-11538
Finl. FörfattnSaml., (363-7) : 715

Lantbruksministeriets beslut N:o 366 om förbud mot fiske i vissa vatten.—28 juni 1962 (Resolution No. 366 of the ministry of agriculture prohibiting fishing in certain waters.—28 June 1962). *Sv*

Finland. Laws, Statutes, etc. (1962) F
8-11539
Finl. FörfattnSaml., (368-9) : 747

Förordning N:o 369 om ändring av förordningen angående verkställighet och tillämpning av lagen om fiske.—29 juni 1962 (Decree No. 369, amending the decree providing for the application of the fishing act.—29 June 1962). *Sv*

Provisions of an administrative nature.

France. Laws, Statutes, etc. (1962) F
8-11540
J. off. Répub. franç., (149) : 6174

Arrêté du 6 juin 1962 fixant la composition des commissions spéciales consultatives pour la réglementation de la pêche dans les lacs du Bourget et d'Annecy (Order prescribing the composition of the special consultative commissions for the regulation of fishing in Le Bourget and Annecy Lakes.—6 June 1962)

F

France. Laws, Statutes, etc. (1962)

8-11541

J. off. Répub. franç., (136) : 5565

Décret n° 62-654 du 8 juin modifiant les articles 3 et 6 du décret du 16 septembre 1958 relatif à la pêche fluviale (Decree No. 62-654, amending arts. 3 and 6 of the decree of 16 September 1958, relating to river fishing.—8 June 1962)

In respect of close seasons.

F

France. Laws, Statutes, etc. (1962)

8-11542

J. off. Répub. franç., (143) : 5933

Arrêté du 8 juin 1962, fixant les conditions à remplir pour pêcher les dimanches et jours fériés dans les cours d'eau de deuxième catégorie en période d'interdiction générale (Order prescribing the conditions required for fishing on Sundays and holidays in second category watercourses during general closed seasons.—8 June 1962)

Amends decree 58-874 of 16 Sep. 1958 in respect of fishing methods.

F

Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)

8-11543

Nyasaland Govt Gaz., (40) Suppl., 161-83

Mudi River waterworks ordinance, 1962 (ordinance No. 13 of 1962): An ordinance to provide for the administration and alteration of the Mudi River water-area and water board for the development and maintenance of waterworks in such water-area.—3 August 1962

Includes protection against water pollution.

F

Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)

8-11544

Sth Rhod. Govt Gaz., (41) Act (21) : 99-101

Lake Kariba fish (levy) act, 1962: act to make provision for the imposition of a levy on fish obtained in lake Kariba and taken elsewhere in the colony for the purpose of trade or business

To remain in force until the expiration of the lake Kariba fishing (duties of excise) (authorization) act, 1962, of the federation.

F

Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)

8-11545

Sth Rhod. Govt Gaz., (47) (Suppl. 421) : 1 p.

Southern Rhodesia proclamation No. 32 of 1962

Entry into force of the lake Kariba fish (levy) act, 1962, on 1 Oct. 1962.

F

Tasmania. Laws, Statutes, etc. (1962)

8-11546

Statut. Rules Aust., (144) : 2 p.

Proclamation made under the fisheries act 1959.—31 July 1962

Declares the specified crown land reserves for the purpose of inland fishing.

Tchad, Republic of. Laws, Statutes, etc. (1962)

F
8-11547

J. off. Tchad, (27) : 889

Décision n° 5/CGP.-CNP du 10 octobre 1962 portant création de vingt-quatre groupes de travail au comité national du plan (Decision No. 5/CGP.-CNP, creating twenty-four working groups within the national planning committee.—10 October 1962)

The rural economy and hydraulics section includes a working group for fisheries products.

Chile. Laws, Statutes, etc. (1962)

F
8-11548

Diario ofc., Santiago, (25.379) : 2312

Decreto Núm. 474 por el que se reglamenta el establecimiento de criaderos de la fauna continental dulceacuícola y fija las tarifas para la venta de productos provenientes de las estaciones de piscicultura administradas por el departamento de pesca y caza.—4 de septiembre de 1962 (Decree No. 474 regulating the establishment of continental sweet water fauna breeding stations and fixing the sales prices for products of the fishbreeding station managed by the department of fisheries and hunting.—4 September 1962)

The establishment of such breeding stations requires the authorization of the ministry of agriculture.

Congo, Republic of. Laws, Statutes, etc. (1962)

F
8-11549

J. off. Congo, (11) : 433-5

Loi n° 25-62 du 21 mai 1962 portant réglementation des établissements dangereux, insalubres ou incommodes (Act No. 25-62 regulating the operation of dangerous, unhealthful or objectionable establishments.—21 May 1962)

The supervision of such establishments is also designed to protect fisheries.

Congo, Republic of. Laws, Statutes, etc. (1962)

F
8-11550

J. off. Congo, (26) : 947-94

Décret n° 62-375 déterminant les conditions d'application de la loi n° 25-62 du 21 mai 1962 portant réglementation des établissements dangereux, insalubres et incommodes.—20 novembre 1962 (Decree No. 62-375 laying down conditions for the application of act No. 25-62 of 21 May 1962, regulating the operation of dangerous, unhealthy or objectionable establishments.—20 November 1962)

One of the purposes is to prevent water pollution.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

F

Colombia. Laws, Statutes, etc. (1962)

8-11551

Diario ofic., Bogota, (30883) : 506

Resolución ejecutiva N° 212 de 16 de julio de 1962 por la cual se autoriza a la corporación autónoma regional de los Valles del Magdalena y del Sinú (CVM), para contratar un empréstito con el Banco Interamericano de Desarrollo, por las cantidades de US \$380.000.00 y \$3.300.000.00 (Executive resolution No. 212 authorizing the regional autonomous corporation of the valleys of Magdalena and Sinú to contract a loan with the Inter-American Development Bank for U.S. \$380,000 and 3.3 million Colombian pesos.—16 July 1962)

The loan to be used exclusively for research programmes concerning *inter alia* water resources and fisheries, within the overall regional development plan for the Sinu River Basin.

F

Costa Rica. Laws, Statutes, etc. (1962)

8-11552

Gaceta, S. José, (238) : 3373

Decreto N° 3043 de 17 de octubre de 1962 por el que se modifica el artículo 27 del decreto-ley N° 363 de 11 de enero de 1949 (reglamento a la ley sobre pesca y caza marítimas) (Legislative decree No. 3043, amending art. 27 of decree-law No. 363 of 11 January 1949 (regulations under the sea fishing and hunting act).—17 October 1962)

In respect of taxes on fishing craft, certain fishing operations, etc.

F

Somalia. Laws, Statutes, etc. (1962)

8-11553

Boll. uff. Repub. somala, (6) (Suppl. 3) : 3-18

Legge 3 giugno 1962, n. 14: ordinamento del governo (Law No. 14: organization of the government.—3 June 1962)

The ministry of agriculture and animal husbandry is responsible for fisheries.

F

Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)

8-11554

Sth Rhod. Govt Gaz., (41), (Suppl. act No. 24) : 155-70

General law amendment act, 1962: act to amend various statutes of the colony and to repeal the governor's powers act, 1951.—Undated

Includes amendments of the fish conservation act, 1960.

F

Finland. Laws, Statutes, etc. (1962)

8-11555

Finl FörfattnSaml., (399-410) : 810

Lag N:o 403 angående ändring av lagen om fiske.—27 juli 1962 (Act No. 403 amending the fishing act.—27 July 1962). *Sv*

In respect of a charge payable for fee receipts issued in connection with fisheries management.

France. Laws, Statutes, etc. (1962)

F
8-11556

J. off. Répub. franç., (186) : 7874

Décret du 2 août 1962 modifiant une réserve de pêche instituée par le décret n° 62-52 du 15 janvier 1962 (Decree modifying a fishing reserve created by decree No. 62-52 of 15 January 1962.—2 August 1962)

In respect of the Loire River.

France. Laws, Statutes, etc. (1962)

F
8-11557

J. off. Répub. franç., (200) : 8364

Décret n. 62-1000 du 18 août 1962 portant publication du protocole entre la France et l'Allemagne concernant la constitution d'une commission internationale pour la protection de la Sarre contre la pollution du 10 décembre 1961 (Decree No. 62-1000, publishing the protocol between France and Germany concerning the creation of an international commission for the protection of the Saar River against water pollution.—18 August 1962)

Protocol of 20 December 1961, entered into force on 1 July 1962.

France. Laws, Statutes, etc. (1962)

F
8-11558

J. off. Répub. franç., (201) : 8401-2

Décret n° 62-1006 du 18.8.62 portant publication du protocole entre la France, l'Allemagne et le Luxembourg concernant la constitution d'une commission internationale pour la protection de la Moselle contre la pollution, du 20 décembre 1961 (Decree No. 62-1006, publishing the protocol between France, Germany and Luxembourg concerning the creation of an international commission for the protection of the Moselle River against pollution, dated 20 December, 1961.—18 August 1962)

Ireland. Laws, Statutes, etc. (1962)

F
8-11559

Act No. 31 of 1962, Separate publication : 16 p.

Fisheries amendment act, 1962: an act to amend the law relating to fisheries and for that purpose to amend and extend the fisheries (consolidation) act, 1959, and certain other enactments.—13 December 1962

Numerous amendments in respect of water pollution, artificial propagation of fish, qualifications of conservators, licences and penalties.

Italy. Laws, Statutes, etc. (1962)

F
8-11560

Gazz. uff. Repub. ital., (230) : 3756

Decreto ministeriale 28 agosto 1962. Regolamentazione della pesca nelle acque interne dell'Emilia (Ministerial decree regulating fishing in the internal waters of Emilia province.—28 August 1962)

Provisions in respect of mesh sizes, etc.

Jordan. Laws, Statutes, etc. (1962)

F
8-11561

Off. Gaz. Jordan, (1934) : 957

Defence order No. 23, prohibiting bird shooting and fishing by any means whatsoever.—25 August 1962

Under article 5 of defence act 1939.

- Madagascar. Laws, Statutes, etc.** (1962) F
8-11562
J. off. Répub. malgache, (256) : 2610-2

Décision n° 258-MAP/FOR du 25 octobre 1962, fixant la date d'ouverture de la pêche à la truite pour l'année 1962 (Decision No. 258-MAP/FOR fixing the opening date of trout fishing for 1962.—25 October 1962)

From 11 November 1962.

- New Zealand. Laws, Statutes, etc.** (1962) F
8-11563
Separate publication, 1962/82 : 3 p.

The fisheries experimental waters (lake Waingata) regulations 1962.—6 June 1962

Declare lake Waingata to be a fisheries experimental water for a further period of five years; prohibit fishing in the lake except pursuant to a special permit.

- New Zealand. Laws, Statutes, etc.** (1962) F
8-11564
Separate publication, 1962/83 : 3 p.

The Hawera (winter season) fishing regulations, 1962.—6 June 1962

Make provisions for a winter season for fishing for perch in the Hawera acclimatization district.

- New Zealand. Laws, Statutes, etc.** (1962) F
8-11565
Separate publication, 1962/99 : 2 p.

The Rotorua trout fishing experimental waters (lake Opouri) regulations, 1962.—27 June 1962

The Rotorua trout fishing experimental waters (lake Opouri) regulations, 1957 are hereby revoked. Declare lake Opouri to be a fisheries experimental water for a further five years and prohibit fishing in lake Opouri, except pursuant to a special authority.

- Niger, Republic of. Laws, Statutes, etc.** (1962) F
8-11566
J. off. Niger, (Spec. 4) : 60-81

Loi n° 62-12 du 13 juillet 1962 instituant un code de travail de la république du Niger (Act No. 62-12 laying down a labour code for the republic of Niger.—13 July 1962)

Comprehensive provisions.

- Peru. Laws, Statutes, etc.** (1962) F
8-11567
Peruano, (6393) : 3 p.

Resolución ministerial No. 3939 por la que se otorga licencia provisional en Puno para una planta envasadora de truchas.—2 de agosto de 1962 (Ministerial resolution No. 3939 granting a provisional licence for a trout tinning plant at Puno.—2 August 1962)

With a capacity of 400 kg. per day.

MISCELLANEOUS AND AUXILIARIES

Peru. Laws, Statutes, etc. (1962)

F
8-11568

Peruano, (6436) : 2 p.

Resolución ministerial No. 4922 por la que se concede licencia provisional para instalar una fábrica de envasado de truchas en Juliaca.—25 de septiembre de 1962 (Ministerial resolution No. 4922 granting a provisional licence for the establishment of a trout tinning plant at Juliaca.—25 September 1962)

With a processing capacity of 400 kg. per day.

New South Wales. Laws, Statutes, etc. (1962)

F
8-11569

Govt Gaz. N.S.W., (79) : 2458

Proclamation made under the fisheries and oyster farms act, 1935, as amended, relating to the inland waters of New South Wales west of the crest of the Great Dividing Range.—20 June 1962

Repeals proclamation published in G.G. No. 134 of 11 Nov. 1960, and prohibits the taking of fish by nets of every description during the months of Sep., Oct. and Nov. of each year from 1962 to 1966, both inclusive.

New South Wales. Laws, Statutes, etc. (1962)

F
8-11570

Govt Gaz. N.S.W., (79) : 2516

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to the entrance waters of Nambucca River, County of Raleigh.—25 July 1962

Prohibits the taking of fish by spears, spear guns and similar devices, from 13 Jul. 1962 to 12 Jul. 1967, in the prescribed waters.

New South Wales. Laws, Statutes, etc. (1962)

F
8-11571

Govt Gaz. N.S.W., (79) : 2516

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to the entrance waters to Wallaga Lake, County of Dampier.—25 July 1962

Prohibits the taking of fish by means of nets of every description other than prawn nets, as prescribed, from 1 Aug. 1962 to 31 Jul. 1967. Repeals the proclamation of 6 Jan. on same subject.

New South Wales. Laws, Statutes, etc. (1962)

F
8-11572

Govt Gaz. N.S.W., (79) : 2516

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to portion of the waters of Burrangylong or Grove Creek, County of Georgiana.—8 August 1962

Prohibits the taking of fish by all methods from 1 Sep. 1962 to 31 Aug 1967, in the prescribed waters.

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New South Wales. Laws, Statutes, etc. (1962)

F
8-11573

Govt Gaz. N.S.W., (79) : 2464

Amendment of the regulations made under the fisheries and oyster farms act, 1935-1960.—15 August 1962

Adds new regulation (No. 161) to amend the schedule listing fresh water fish, by omitting several species.

Razran, G. (1961)

G
8-11574

Psychol. Rev., 68 : 81-147

The observable and the inferable conscious in current Soviet psychophysiology: interoceptive conditioning, semantic conditioning, and the orienting reflex

PA 36 (1) : 67. Systematic review of Russian psychobiology; concentrates on recent output—1500 reports since 1950—and also incorporates a brief historical prospectus.

Brereton, J. Le G. (1962)

G
8-11575

Ecology, 43 (1) : 63-9

A laboratory study of population regulation in *Tribolium confusum*

BA 38A (2) 4827. Changes in the number of small larvae, pupae, and new adults during the first 190 days of a *Tribolium confusum* population were found to produce curves of the same general pattern. This suggests little or no change in the probability of survival of these life stages during the initial growth of the population when the major changes of population size are taking place.

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- M
8-12001
- WMO. Fourth Congress, Geneva 1963** (1962)
Geneva, Cg-IV/Doc. 51, ADD. 1, mimeo, 8 p.
Reports by presidents of technical commissions. Maritime meteorology.
Addendum to the report by the president of the commission for maritime
meteorology—submitted by the president of CMM

Co 8-07012.

- M
8-12002
- Slijper, E. J.** (Pomerans, A. J., Transl.) (1962)
London, Hutchinson & Co. (Publ.) Ltd., 475 p.
Whales

En 59-5300. Deals with all aspects of cetacean biology and whale industries,
under following chapter headings: Historical introduction; Evolution and
external appearances; Locomotion and locomotory organs; Respiration;
Heart, circulation, and blood; Behaviour; Hearing; The production of sounds;
Senses and the central nervous system; Feeding; Metabolism; Distribution
and migration; Reproduction; The future of whales and whaling; Classification
of Cetacea; Bibliography, by chapters. Appendix: Names of cetaceans in
different languages. Index.

- M
8-12003
- Anon.** (1962)
Science, 137 (3526) : 271
[Announcements]

Incl. note on conversion of presidential yacht 'Williamsburg' for IIOE.

- M
8-12004
- ICW** (1964)
Rep. int. Comm. Wal., (14), 1962/63 : 122 p.

Lists of commission members and participants; general report of whaling
activities, notifications and resolutions; table of infractions; appendices incl.
report of scientific committee and sub-committee, list of documents received,
financial accounts; table of oil production statistics for 1952/53–1962/63;
map of world with whaling areas. This issue also contains the reports and
supplements by the Committee of Three Scientists on the Special Scientific
Investigation of the Antarctic Whale Stocks, describing the analyses of stock
data, the results obtained and recommendations for conservation action by
the Commission.

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Aibulatov, N. A. & V. P. Nikolaev (1960) M
8-12005
JPRS : 4105, 10 p.

Jubilee conference of the Black Sea experimental scientific research station of the institute of oceanology of the USSR academy of sciences

En 8-12004.

Anon. (1963) M
8-12006
Norsk Hvalfangst-tid., 52 (3) : 70-2
Whales and whaling

Section of the annual report of the National Oceanographic Council for the period 1 Apr. 1961-31 Mar. 1962 describing the whale research activities of the institute.

Morris, D. (1962)* M
8-12007
New York, Collier books, 224 p.
A family guide to saltwater fishing

IIOE (1963) M
8-12008
IIOE Newslett. Jap., (3) : 6 p.

Published by IIOE Data Centre of Japan, Meteorological Agency, Tokyo. Gives news of progress of Indian Ocean expedition plans and execution, especially Japanese participation. Incl. addresses, cruise plans, resolution of IOC etc.

McMichael, D. F. (1962) M
8-12009
Aust. Nat. Hist., 14 (3) : 74
Sea shells of the world

Review.

Deacon, G. E. R. (1962) M
8-12010
London, P. Hamlyn, 297 p.
Oceans; an atlas history of man's exploration of the deep

American ed. (Garden City, N.Y., Doubleday) has title: Seas, maps and men; an atlas history of man's exploration of the oceans.

Densmore, D. (1962) M
8-12011
Oceanus, 9 (2) : 22

Re 8-12010.

GENERAL

- M
8-12012
- Hill, M. N.** (Ed.) (1962)
New York, J. Wiley & Sons: 864 p.
The sea. Ideas and observations on progress in the study of the seas.
Vol. 1. Physical oceanography

Treatises collected under sections: Fundamentals; Interchange of properties between sea and air; Dynamics of ocean currents; Transmission of energy within the sea; Waves; Turbulence; and the Physics of sea-ice. Contains 8-12013, 8-12044 to 8-12068, 8-12329.

- M
8-12013
- Hersey, J. B. & R. H. Backus** (1962)
In 8-12012 : 498-539
Sound scattering by marine organisms

Discusses the topic under chapters: Occurrence and description of scattering layers; Identification of sound scatterers; Sound-scattering theory; Sound-scattering observations; What is "the deep scattering layer"?; Ideas and miscellaneous observations.

- M
8-12014
- Anon.** (1962)
Oceanus, 9 (2) : 23
Rediscovering the sea

Re 8-12012.

- M
8-12015
- Gaskell, T. F.** (1962)
New Scient., 16 (317) : 646
Study of sea water

Re 8-12012.

- M
8-12016
- Clarke, R.** (1963)
Nature, Lond., 197 (4886) : 653-4
Zoological expeditions

Short report on the twenty-eighth annual meeting of the Association of British Zoologists held at the offices of the Zoological Society of London on Jan. 5. Several papers were read on "The scientific aims, planning and results of zoological expeditions".

- M
8-12017
- Moore, J. C.** (1963)
Science, 140 (3563) : 166-7
Cetacea

Re 8-12002. Treats structural and functional aspects of cetacean biology, behaviour, distribution and migration, evolution, the history of whaling, and the future of whaling. With ill.

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Anon. (1963)

MG
8-12018

New Scient., 18 (333) : 39

A nippy craft for undersea studies

U.S. Office of Naval Research studies new propulsion systems to improve manoeuvrability of special-purpose submarines.

Vershinskii, N. V. (1960)*

MF
8-12019

Moskva, Gosenergoizdat, 223 p.

Podvodnoe televidenie (Underwater television)

Fridriksson, A. (1962)

MF
8-12020

Fish. News int., 1 (5) : 35-7

International council for the exploration of the sea

Reviews history of ICES, its publications, symposia, advisory role, structure, and organizations of cooperative research.

Cade, C. M. (1963)

MF
8-12021

Discovery, 24 (2) : 22-7

Navigation—man's debt to the animals

Describes a representative selection of animal navigation systems and gives physical bases of these systems and shows which have man-made counterparts. Refers to *Gymnarchus*, *Electrophorus*, *Talitrus*, *Limulus* and *Daphnia*.

Scott, T. D. (1962)*

MF
8-12022

London, British Association for the Advancement of Science, 338 p.

The marine and fresh water fishes of South Australia

Lanham, U. (1962)*

MF
8-12023

London, Columbia University Press, 116 p.

The fishes

An introduction to fishes, written in the broadest detail, specifically for those without any biological training.

Greenwood, P. H. (1963)

MF
8-12024

Nature, Lond., 196 (4861) : 1246

The fishes

Re 8-12023.

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- Yanner-Wilson, J.** (1963) MF
8-12025
Nature, Lond., 195 (4846) : 1055-6
 The Ghana science association

Short report on the 2nd congress of the association held in June-July at the University of Ghana. Two papers on fisheries are referred to: "The development of fishery resources" by G. C. Rawson and J. N. N. Adjetey and "The spawning migration of *Sardinella aurita* (Val.)" by E. A. Kwei.

- USPHS** (1961)* F
8-12026
 233 p.
 Soviet water supply and pollution control

Available from Office of Technical Services, U.S. Department of Commerce, Washington.

- Goodey, J. B.** (1963) F
8-12027
 London, Methuen, 544 p.
 Soil and freshwater nematodes

NE 1951 Goodey, T. Contains a brief introduction on basic morphology of nematodes; a classification of the groups dealt with, set out in full detail from orders to genera; describes and illustrates with line drawings each genus and its type species. There is also a section noting the salient features of the biology of each genus. Provides 87 tabular keys to enable the field worker to identify a nematode, first to its order, then through the succeeding lower categories to its genus. Contains bibliography which aims to include a reference to the standard works on every species mentioned.

- Mansueti, R. J.** (1963) F
8-12028
Chesapeake Sci., 4 (1) : 63
 The Balkan lake Ohrid and its living world
 Re 60-5293.

- Wynne-Edwards, V. C.** (1963) G
8-12029
Nature, Lond., 197 (4867) : 527
 Ecology for students

Re 62-04025. Based on the larger work of Andrewartha and Birch, The distribution and abundance of animals (1954). A section on theory mainly concerned with terrestrial environment and a practical course, consisting of twenty varied experiments to be carried out in the laboratory.

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Blackburn, M. (1962)

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Spec. sci. Rep. U.S. Fish Wildl. Serv.—Fish., (400) : 1-48

Tuna oceanography in the eastern tropical Pacific

BA 40E (1) 391. A report on three years of oceanographic investigation in the eastern tropical Pacific Ocean.

Bryan, G. W. & E. Ward (1962)

M
8-12031

J. Mar. biol. Ass. U.K., 42 (2) : 199-241

Potassium metabolism and the accumulation of 137 caesium by decapod Crustacea

BA 40E (1) 4132. The accumulation of Cs^{137} from sea water has been examined in relation to K metabolism in the lobster *Homarus vulgaris* and in the prawn *Palaemon serratus*.

Mallet, L., L. V. Perdriau & J. Perdriau (1963)

M
8-12032

C.R. Acad. Sci., Paris, 256 (16) : 3487-9

Pollution par les hydrocarbures polybenzéniques du type benzo-3.4 pyrène de la région occidentale de l'Océan Glacial Arctique (Pollution of the western region of the Arctic Ocean by hydrocarbons of the type benzo-3.4)

Preliminary note reporting results of analyses of sediments collected on the Greenland coast. The origins of the pollution are discussed.

Pritchard, D. W. (1963)

M
8-12033

Chesapeake Sci., 4 (1) : 60

Oceanography

Re 62-01178.

Tum, P. P. (1960)*

M
8-12034

Moskva, n.p., 43 p.

Aral'skoie more: navigatsionno—geograficheskii i gidrometeorologicheskii ocherk (The Aral Sea: Navigational, geographic and hydrometeorological essays)

Descriptors: Aral Sea, navigation, geography, hydrology and meteorology.

Tum, P. P. (1961)

M
8-12035

JPRS: 9448, 43 p.

The Aral Sea: Navigational, geographic and hydrometeorological essays

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- Ericson, D. B., M. Ewing & G. Wollin** (1963) M
8-12036
Science, 139 (3556) : 727-37

Pliocene-Pleistocene boundary in deep-sea sediments

Briefly reviews earlier studies of sediment cores and discusses climatic implications.

- Swallow, M.** (1962) M
8-12037
Discovery, 23 (6) : 17-22

Deep currents in the oceans

Discusses charting of the deep circulation of the oceans by using new direct measuring equipment, and implications of knowledge of these deep water movements for meteorology and fishing.

- Stommel, H.** (1963) M
8-12038
Science, 139 (3555) : 572-6

Varieties of oceanographic experience

The ocean can be investigated as a hydrodynamical phenomenon as well as explored geographically.

- Seckel, G. R.** (1962) M
8-12039
Fish. Bull., U.S., 61 (193) : 371-427

Atlas of the oceanographic climate of the Hawaiian Islands region

In the area bounded by 10° N, 30° N, 150° W, and 180° W, the distribution of surface variables is investigated in terms of associated physical processes.

- Japan Meteorological Agency** (1962) M
8-12040
Results mar. Obsns, Tokyo, (29) : 284 p.

Tabulated physical-chemical and biological data January-June 1961, in N. Pacific

- Carruthers, J. N.** (1962)* M
8-12041
Oceanus, 9 (2) : 17

Atmospheric model studies

Le 8-08099.

- Ponomarenko, G. P.** (1963) M
8-12042
Dokl. Akad. Nauk SSSR, 149 (5) : 1178-81

Glubinnoe protivotechenie Lomonosova na ekvatore v Atlanticheskom okeane (Lomonosov's abyssal equatorial counterflow in the Atlantic)

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Wilson, J. T. (1963)

M
8-12043

Nature, Lond., 197 (4867) : 536-8

Evidence from islands on the spreading of ocean floors

Based on literature published about ocean islands. Evidence is obtained of possible horizontal motions of islands. Vertical motions have been discussed.

Fofonoff, N. P. (1962)

M
8-12044

In 8-12012 : 3-30

Physical properties of sea-water

Discusses the topic under chapters: The equilibrium thermodynamic state; Equation of state for sea-water; Entropy; Chemical potential difference; The non-equilibrium state; other physical properties of sea-water.

Eckart, C. (1962)

M
8-12045

In 8-12012 : 31-41

The equations of motion of sea-water

Discusses the topic under chapters: Thermodynamics; Hydrodynamics; The irreversible processes; Transformation of the equations; The zeroth approximation; The first approximation; Definitions related to convective motion; The field equations.

Deacon, E. L. & E. K. Webb (1962)

M
8-12046

In 8-12012 : 43-87

Small-scale interactions

Discusses the topic under chapters: General considerations of transfer; Momentum transfer and the wind-profile; Drag coefficients of the sea surface; Transfer of heat and water vapour.

Malkus, J. S. (1962)

M
8-12047

In 8-12012 : 88-294

Large-scale interactions

Discusses the topic under chapters: How the whole system works; Determination of air-sea fluxes; Climatology of energy exchange and the global heat and water budgets; Heat and water exchange and its role in tropical circulations; Large-scale momentum relations; Exchange mechanisms and fluctuations; Exchange fluctuations in mid-latitudes and long-period interaction anomalies; Concluding remarks.

Rex, R. W. & H. D. Goldberg (1962)

M
8-12048

In 8-12012 : 295-304

Insolubles

Discusses the topic under chapters: Meteorology of transport; Eolian materials in marine sediments.

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

Woodcock, A. H. (1962)
In 8-12012 : 305-12
 Solubles

M
 8-12049

Revelle, R. & H. E. Suess (1962)
In 8-12012 : 313-22
 Gases

M
 8-12050

Discusses the topic under chapters: Oxygen and nitrogen; Rare gases; Carbon dioxide.

Fofonoff, N. P. (1962)
In 8-12012 : 323-96
 Dynamics of ocean currents

M
 8-12051

Discusses the topic under chapters: Conservation equations for momentum and mass; separation into steady and time-dependent motion; Magnitude of forces; Steady-state circulation; Steady inertial circulation; Convective circulation; Time-dependent motion.

Tyler, J. E. & R. W. Preisendorfer (1962)
In 8-12012 : 397-451
 Transmission of energy within the sea. Light

M
 8-12052

Discusses the topic under chapters: Physical constructs; Instrumentation for the measurement of the underwater light field and the determination of the optical properties of the sea; Radiance distribution; Attenuation coefficient; Volume scattering functions and total scattering coefficient; Irradiance; Diffuse attenuation function and reflectance function; Scalar irradiance (spherical irradiance); Absorption coefficient; Path function; Data; Applications; List of symbols.

Duntley, S. Q. (1962)
In 8-12012 : 452-5
 Underwater visibility

M
 8-12053

Discusses the topic under chapters: Image transmission; Inherent contrast; Sighting range.

Clarke, G. L. & E. J. Denton (1962)
In 8-12012 : 456-68
 Light and animal life

M
 8-12054

- Liebermann, L. N.** (1962) M
8-12055
In 8-12012 : 469-75
 Other electromagnetic radiation

Discusses the topic under chapters: Electromagnetic properties of sea-water; Propagation through sea-water; The effect of the sea-surface on electromagnetic propagation; Natural electromagnetic radiation or "noise" in the sea.

- Vigoreux, P. & J. B. Hersey** (1962) M
8-12056
In 8-12012 : 476-97
 Sound in the sea

Discusses the topic under chapters: The nature of sound; Propagation of sound; in water; Noise; Instruments and applications of sound to oceanography.

- Cartwright, D. E.** (1962) M
8-12057
In 8-12012 : 567-89
 Waves. Analysis and statistics

Discusses the topic under chapters: Fundamental equations of wave motion; Statistical formulation; Properties of a wave system in terms of its directional energy spectrum; Estimating the directional energy spectrum; Waves recorded by a single detector; Spectral measurement; Second-order approximations to energy spectra.

- Rossiter, J. R.** (1962) M
8-12058
In 8-12012 : 590-610
 Long-term variations in sea-level

Discusses the topic under chapters: The determination of mean sea-level; Causes of variations in sea-level; The analysis of observations; Some geophysical implications of long-term variations in sea-level; Conclusion.

- Groen, P. & G. W. Groves** (1962) M
8-12059
In 8-12012 : 611-46
 Surges

Discusses the topic under chapters: Description; Dynamics and forecasting.

- Munk, W. H.** (1962) M
8-12060
In 8-12012 : 647-65
 Long ocean waves

Discusses the topic under chapters: The instruments; The spectrum; Surf beat; Shelf waves; Tsunamis.

Barber, N. F. & M. J. Tucker (1962)
In 8-12012 : 664-99
 Wind waves

M
 8-12061

Discusses the topic under chapters: Kinematics of waves; The description of a complicated wave pattern; the wave spectrum; Theories of wave generation by wind; Wave prediction; Waves from distant storms; Waves approaching the shore; The surf zone; Ships and waves; Methods of observation and analysis—methods taking no account of direction of travel; Methods of observation and analysis—the directional power spectrum.

Darbyshire, J. (1962)
In 8-12012 : 700-19
 Microseisms

M
 8-12062

Discusses the topic under chapters: Relation between sea waves and microseisms; The nature of microseisms; Refraction of microseisms; Storm tracking and estimation of the direction of approach of microseisms; Estimation of direction from the nature of microseisms; Instruments; Other work.

Cox, C. S. (1962)
In 8-12012 : 720-30
 Ripples

M
 8-12063

Discusses the topic under chapters: Spectrum and mean square slope; Effect of slicks; Shape of a rippled water surface; Growth of ripples.

LaFond, E. C. (1962)
In 8-12012 : 731-51
 Internal waves. Part 1

M
 8-12064

Discusses the topic under chapters: Measurements; Observed relation.

Cox, C. S. (1962)
In 8-12012 : 752-63
 Internal waves. Part 2

M
 8-12065

Discusses the topic under chapters: Differential equations; Spectrum; Internal waves and turbulence. Co 8-12064.

Hansen, W. (1962)
In 8-12012 : 764-801
 Tides

M
 8-12066

Discusses the topic under chapters: The hydrodynamic equations and their application to tidal problems; Tidal observation; Tidal charts; Classical theory; Numerical methods for ascertaining the tides and tidal currents. Boundary-value problems; The application of difference methods to initial-boundary problems; Numerical solutions of initial-boundary-value problems of tides in one and two dimensions; Internal tides.

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- M
8-12067
- Bowden, K. F.** (1962)
In 8-12012 : 802-25
Turbulence

Discusses the topic under chapters: General properties of turbulence; Turbulence in the sea; Turbulent fluctuations and turbulent transports; Vertical turbulence; Horizontal turbulence.

- M
8-12068
- Pounder, E. R.** (1962)
In 8-12012 : 826-38
The physics of sea-ice

Discusses the topic under chapters: Mechanical properties; Thermal properties; Electrical properties; Growth and disintegration of an ice cover; Theory of sea-ice structure and properties.

- M
8-12069
- Ivanov, V. M.** (1961)
Probl. Sev. (En Transl.), (4) : 25-44

On the relationship of hydrometeorological processes in the Atlantic part of the Arctic and the thermal and dynamic state of Gulf Stream

- M
8-12070
- Timofeev, V. T.** (1961)
Probl. Sev. (En Transl.), (4) : 45-56

The effect of the deep layers of Atlantic waters on the hydrological regime of the Kara Sea

- M
8-12071
- Shishkov, Yu. A.** (1961)
Probl. Sev. (En Transl.), (4) : 133-40

Ice concentration in the southwest part of the Kara Sea and meridional heat transfer in the atmosphere

- M
8-12072
- Bulgakov, N. P.** (1961)
Probl. Sev. (En Transl.), (4) : 141-8

Determination on functional graphs of the time at which water reaches the freezing point and of the depth of density mixing

- M
8-12073
- Keen, M. J.** (1963)
Nature, Lond., 197 (4870) : 888-90
Magnetic anomalies over the Mid-Atlantic

Intensity of earth's magnetic field over Atlantic Ocean measured on a number of flights organized by department of Mines and Technical Surveys of Canada and also under project Magnet (U.S. Hydrographic Office).

PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

Strong, C. C. & R. G. Skolmen (1963)

M
8-12074

Nature, Lond., 197 (4870) : 890

Origin of drift-logs on the beaches of Hawaii

Pacific Ocean currents can carry objects to the Hawaiian Islands not only from North America, but also from Western Pacific islands and perhaps from the mainland of Asia. Since logs float very low in water, they should be little influenced by wind action.

Carruthers, J. N. (1963)

M
8-12075

Nature, Lond., 197 (4871) : 942-6

History, sand waves and near-bed currents of la Chapelle Bank

Now that presence of sand ripples beneath very great depths water has been revealed by submarine photography, it is of interest to discover that speeds of water movement can occur very close down to deep ocean floor at such places. Particular interest is attached to places where much is known about convolutions of sea-bed because of detailed operations with echo-sounding sets and where depth is small enough for it to be possible to repeat the easy single bottom current measurements at hourly intervals. Measurements of currents close to bottom were made on La Chapelle Bank on 7 and 8 Nov. 1962, from research vessel 'Sarsia' belonging to Marine Biological Association of the United Kingdom.

California University. Scripps Institution of Oceanography (1961)

M
8-12076

Berkeley, University of California, 349 p.

Oceanic observations of the Pacific pre-1949

Contains observations made prior to 1949. Apart from incomplete coverage of Japanese and Russian publications the bibliography offers access to almost all of the Pacific oceanographic data published in other media than the present series.

Greenhalgh, R. & J. P. Riley (1963)

M
8-12077

Nature, Lond., 197 (4865) : 371-2

Occurrence of abnormally high fluoride concentrations at depth in the oceans

During an investigation of the constancy of ionic composition of sea water and in particular of the distribution of fluoride ion in the oceans, unusually large variations in the fluoride/chlorinity ratio were found.

Davidson, C. & M. J. Keen (1963)

M
8-12078

Nature, Lond., 197 (4865) : 372-3

Size analyses of turbidity current sediment

Analyses of sediment cores obtained from the Iberia Abyssal Plain.

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- Russel, R. J.** (1963) M
8-12079
Science, 139 (3549) : 9-15
 Recent recession of tropical cliffy coasts .
 Elevated benches and other coastal forms give evidence of eustatic changes in sea level.
- Fisher, R. L. & R. W. Raitt** (1962) M
8-12080
Deep-Sea Res., 9 : 423-43
 Topography and structure of the Peru-Chile Trench
 Data from 5400 miles of echo-sounding traverses and eight seismic-refraction stations (three off Peru, five off Chile) are reported.
- Howet, M. R.** (1962) M
8-12081
Deep-Sea Res., 9 : 445-55
 Some direct measurements of the non-tidal drift on the continental shelf between Cape Cod and Cape Hatteras
- Francis, T. J. G.** (1962) M
8-12082
Deep-Sea Res., 9 : 457-64
 Black mud canyon
 A prominent canyon in the continental slope 150 miles west of Brittany was followed from its origin at the edge of the shelf to a depth of 2000 fm. The bathymetric chart covers an area of approximately 5 by 30 nautical miles and shows contours at 100 fm intervals.
- Steele, J. H., J. R. Barrett & L. V. Worthington** (1962) M
8-12083
Deep-Sea Res., 9 : 465-74
 Deep currents south of Iceland
 Direct current measurements with neutrally-buoyant floats and routine hydrographic observations were made south of Iceland to study the deep current resulting from overflow of Norwegian Sea water into the Atlantic.
- Needham, H. D.** (1962) M
8-12084
Deep-Sea Res., 9 : 475-86
 Ice-rafted rocks from the Atlantic Ocean off the coast of the Cape of Good Hope
- Volkman, G.** (1962) M
8-12085
Deep-Sea Res., 9 : 493-500
 Deep current observations in the western North Atlantic
 Reports on two series of direct current measurements across the region inshore of the Gulf Stream.

Niskin, S. J. (1962)

Deep-Sea Res., 9 : 501-3

A water sampler for microbiological studies

M
8-12086

A Bellows type water sampler consisting of a spring-activated metal frame and a detachable two-litre, sterile, disposable container, is described. The device can operate at any oceanic depth.

Kobe Marine Observatory. Oceanographical Section (1962)

Results mar. Obsns, Tokyo, (27)

(Report of the oceanographic observations in the sea south of Honshu in March, 1960). *Ni*

M
8-12087

Charts of geopotential topography, chlorinity, surface current, temperature dissolved O₂, phosphate-P, nitrite-N and diatoms. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (12).

Cox, R. A. (1962)

Deep-Sea Res., 9 : 504-6

Temperature compensation in salinometers

M
8-12088

The temperature coefficient of the electrical conductivity of seawater varies considerably with the salinity. The magnitude of the variations are shown, and the effect on the calibration of salinometers. It is shown that potassium chloride cannot be used to calibrate precision salinometers.

Gudkovich, Z. M. (1961)*

Okeanologiya, 1 (4) : 608-12

(On the nature of the Pacific current in Bering Strait and the causes of its seasonal variations). *Ru*

M
8-12089

Gudkovich, Z. M. (1962)

Deep-Sea Res., 9 : 507-10

On the nature of the Pacific current in Bering Strait and the causes of its seasonal variations

M
8-12090

En 8-12089.

Voit, S. S. et al. (1961)*

Okeanologiya, 1 (4) : 614-25

(Some special properties of the water circulation in the Black Sea and of the conditions near the Bosphorus). *Ru*

M
8-12091

An analysis of the results obtained on the ninth voyage of the 'Mikhail Lomonosov' on the general hydrological and hydrochemical conditions in the Black Sea in autumn 1960.

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- Voit, S. S. et al.** (1962) M
8-12092
Deep-Sea Res., 9 : 511-22
 Some special properties of the water circulation in the Black Sea and of the conditions near the Bosphorus
En 8-12091.
- Gakkel', Ia. Ia. & L. P. Samsoniia** (1961)* M
8-12093
Okeanologiia, 1 (4) : 691-700
 (The first drifting radio-buoys). *Ru*
- Gakkel', Ya. Ya. & L. P. Samsoniia** (1962) M
8-12094
Deep-Sea Res., 9 : 538-46
 The first drifting radio-buoys
En 8-12093.
- Tarasov, A. N.** (1961)* M
8-12095
Okeanologiia, 1 (4) : 701-9
 (An evaluation of the accuracy of the co-ordination of sounding and oceanographic work on the open sea (sailing on a calculated course)). *Ru*
- Tarasov, A. N.** (1962) M
8-12096
Deep-Sea Res., 9 : 547-55
 An evaluation of the accuracy of the co-ordination of sounding and oceanographic work on the open sea (sailing on a calculated course)
En 8-12095.
- Shuleikin, V. V.** (1962) M
8-12097
 OTS, 11 p.
 Analysis of measurements of largest wind-caused waves in the ocean
En 1956, Shuleikin, V. V. Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.
- Gerard, R. D.** (1962) M
8-12098
 Palisades, N.Y., Lamont Geological Observatory, AT (30-1)-1808, 16 p.
 Lamont sea water radiocarbon program
 Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

- Konaga, S.** (1962) M
8-12099
J. Mar. met. Soc., Kobe, 37 (3) :
 (The internal wave of short period from the hysteresis of bathythermograph). *Ni En*

Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (3).

- Kobe Marine Observatory. Oceanographical Section** (1962) M
8-12100
Results mar. Obsns, Tokyo, (26)
 (Report of the oceanographic observations in the sea south of Honshu from July to August, 1959). *Ni*

Charts of geopotential topography, chlorinity, surface current, temperature, dissolved O₂, phosphate-P, nitrite-N and diatoms. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (11).

- Kawanabe, Y.** (1962) M
8-12101
J. Mar. met. Soc., Kobe, 37 (4)
 (The synoptic and statistical investigation on the prediction of typhoon motion (the final reports)). *Ni En*

Charts of typhoon frequency crossing each 2° square during 1912-1960, for months Jun. to Nov. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (13).

- Ito, A.** (1962) M
8-12102
J. Mar. met. Soc., Kobe, 38 (1)
 (On the statistical characteristics of winds in the sea south of Honshu). *Ni En*

Comparison of wind-velocity observations at sea with those at land stations. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (15).

- Japan Society for the Promotion of Science. Deep Sea Research Committee** (1961) M
8-12103
Rep. JEDS, 2
 Collected papers concerning with the Japanese expeditions of deep sea
 Contains 8-12104 to 8-12108.

- Iijima, A. & H. Kagami** (1961) M
8-12104
Rep. JEDS, 2 (11)
 23. Lawsonite—and pumpellyite-rock fragments from deep-sea bottom off the coast of Sanriku, northeastern Japan—Report on JEDS-2S of the Japanese deep sea expedition (1)

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Miyake, Y. & Y. Sugimura (1961)

M
8-12105

Science, 133 (3467) : 1-3

Ionium-thorium chronology of deep-sea sediments of the western north Pacific Ocean

The rate of deposition of deep-sea deposits collected at the depths of 6215 to 8450 m in the western part of the North Pacific Ocean was estimated by means of the ionium/thorium ratio. The ratio was determined by an alphaspectrometer. Issued also as: *Rep. JEDS*, 2 (15).

Kobayashi, K., K. Oinuma & T. Sudo (1961)

M
8-12106

Rep. JEDS, 2 (16)

(20. Clay minerals in the core sample of deep sea sediment from Japan Trench). Ni En

Clay mineralogical study was carried out on the core sample (JEDS-1-R), which were obtained from the ocean floor of 8450 m water depth, at the station 142° 18' E, 30° 24' N at the time of Japanese expedition of deep sea in Jun. 1959. Clay mineral analyses were carried out by means of X-ray thermal, and electron micrographic methods.

Uyeda, S. et al. (1961)

M
8-12107

Bull. Earthq. Res. Inst. Tokyo, 39 : 115-131

6. Studies of the thermal state of the earth. The seventh paper: a sea bottom thermogradimeter. Ni

Description of an apparatus, for measuring the geothermal gradient in the sea floor, which consists of a probe containing two pairs of thermistors and a recorder. Issued also as: *Rep. JEDS* 2 (18). Ci 8-08039.

Hosohara, K., R. Kuroda & H. Hamaguchi (1961)

M
8-12108

Nippon Kagaku Zasshi, 82 (3) : 347-9

(Photometric determination of mercury in sea water). Ni En

Description of the method and presentation of some results. Issued also as: *Rep. JEDS* 2 (19).

Japan Society for the Promotion of Science. Deep Sea Research Committee (1961)

M
8-12109

Rep. JEDS, 3

Collected papers concerning with the Japanese expeditions of deep sea

Contains 8-12110, 8-12179 and 8-12111 to 8-12116.

Hosokawa, K. (1961)

M
8-12110

Nippon Kagaku Zasshi, 82 (8) : 1107-8

(Mercury content of deep sea water). Ni En

Examination of mercury dissolved in sea water at depths of 0,500 and 3,000 m in the Lamapo Deep.

- Hosokawa, K.** (1962) M
8-12111
Rep. JEDS, 3 (21)
 (Mercury content of deep sea water). *Ni* *En*
 Ci 8-12110.

- Hamaguchi, H., M. Osawa & N. Onuma** (1961) M
8-12112
Nippon Kagaku Zasshi, 82 (6) : 691-3
 (The vertical distribution of minor elements in core samples from the Japan Trench). *Ni* *En*
 Spectrochemical investigation.

- Hamaguchi, H., M. Osawa & N. Onuma** (1962) M
8-12113
Rep. JEDS, 3 (23)
 (The vertical distribution of minor elements in core samples from the Japan Trench). *Ni* *En*
 Ci 8-12112.

- Miyake, Y. et al.** (1962) M
8-12114
J. Radiat. Res., 3 (3) : 141-7
 Penetration of ^{90}Sr and ^{137}Cs in deep layers of the Pacific and vertical diffusion rate of deep water
 Issued also as: *Rep. JEDS*, 3 (25).

- Fukuoka, J.** (1962) M
8-12115
J. oceanogr. Soc. Japan, 18 (1) : 5-12
 Abyssal circulation in the Atlantic near the poles and abyssal circulation in the Pacific and other oceans in relation to the former
 Discussion of data with regard to oxygen salinity and density. Issued also as: *Rep. JEDS*, 3 (27).

- Iijima, A. & H. Kagami** (1962) M
8-12116
Rep. JEDS, 3 (26)
 (Cainozoic tectonic development of the continental slope, northeast of Japan). *Ni* *En*

- Kobe Marine Observatory. Oceanographical Section** (1963) M
8-12117
Bull. Kobe Mar. Obs., (170) : 76-109
 (On storm surges on the coast in charge of the Kobe Marine Observatory). *Ni* *En*

Presents data on storm surges on the coast between Wakayama and Yamaguchi Prefectures supplementary to the data contained in the 'Manual of the storm surge on the coast of western Japan'.

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- Yabuki, B.** (1961) M
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Bull. Kobe Mar. Obs., (170) : 58-75
 (Reports of the marine meteorological condition of typhoon No. 6118 (the Muroto Typhoon 2) (based on the weather reports from ships)). *Ni En*

Examination of the meteorological conditions prevailing at the time of this typhoon and of the distribution of wind force in Osaka and Tokyo Bays.

- Miyazaki, M.** (1963) M
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Bull. Kobe Mar. Obs., (170) : 33-57
 (The statistical study on the tracks of typhoon). *Ni En*

Statistical study of the variation in the tracks of typhoons and the speed of movement of their centres. Development of a practical method for forecasting movement of a typhoon.

- Kobe Marine Observatory. Maritime Meteorological Section** (1963) M
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Examination of wind and surface water temperature records.

- Schmalz, R. F. & K. E. Chave** (1963) M
8-12121
Science, 139 (3560) : 1206-7
 Calcium carbonate: factors affecting saturation in ocean

Results indicate that marine waters are not in equilibrium with the bulk carbonate sediments with which they are in contact, and they are super-saturated with respect to pure calcite. Supersaturation seems to result from a metastable equilibrium between sea water and the most soluble solid phase available locally in excess.

- Osterberg, C., L. D. Kulm & J. V. Byrne** (1963) M
8-12122
Science, 139 (3558) : 916-7
 Gamma emitters in marine sediments near the Columbia River

Analyses sediment cores collected at 26 different locations 5 to 35 miles offshore. Finds chromium-51 and zinc-65 as the principal radionuclides. Radioactivity falls off sharply with distance from the mouth of the Columbia River, indicating that the river serves as a common source of the artificial radionuclides.

- Fontan, J. et al.** (1963) MG
8-12123
Nature, Lond., 197 (4867) : 583-4
 Meteorological conditions dependence of radon concentration in the air above the Atlantic Ocean

Berthois, L. & Y. Le Guilly (1963)

MF
8-12124

C.R. Acad. Sci., Paris, 256 (19) : 4060-3

Océanographie—la stratification des eaux dans l'estuaire de la Loire
(Oceanography—the stratification of the waters in the estuary of the Loire)

Measurements of the dynamic of estuarine waters.

Fedorova, G. V. (1963)

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8-12125

Dokl. Akad. Nauk SSSR, 150 (1) : 168-9

Vliianie temperatury vody, vozrasta i pola ryb na pogloshchenie i vyvedenie C^{14} (Absorption and elimination of C^{14} by fishes, as dependent on their age and sex, as well as on water temperature)

Anon. (1963)

MF
8-12126

Hydraul. Res. Sta. Notes, (5) : Unpag. 2 p.

Measuring the rate of sediment transport with radioactive tracers

Two methods of using radioactive tracers to measure the rate of sediment transport have been developed. They work well in the laboratory but further development work is necessary before they can be used with ease in the field.

Anon. (1963)

MF
8-12127

Hydraul. Res. Sta. Notes, (5) : Unpag. 2 p.

Karnafuli River, East Pakistan

A study of the hydraulic aspect of the port of Chittagong.

Suzuki, S. (1961)

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8-12128

J. Wat. Wks & Sew. Ass., Japan, 36 (319) : 79-82

Some physiological characters of a sewage fungus

WPA 36 (4) 686.

Anon. (1963)

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8-12129

New Scient., 18 (333) : 13-4

The problem of the shrinking Caspian

Spilhaus, A. (1963)

M
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Mondo sommerso, 5 (4) : 29-49

Il pianeta mare The planet sea

Article about oceans and their study.

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Spiegler, K. S. (1962)
New York, J. Wiley & Sons, 167 p.
Salt-water purification

MF
8-12131

Introduction to subject of sea-water desalination. Chapters are: The composition of natural salt waters; Energy requirements; Scale; Distillation methods; Electrodialysis; Freezing processes; Ion exchange; Miscellaneous methods; Summary and conclusions; Appendix; Bibliography.

Tanner, W. F. (1963)
Science, 139 (3549) : 41-2

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Spiral flow in rivers, shallow seas, dust devils, and models

Observed in meandering and braided rivers, very shallow sea water, model experiments. Experimental work also produced standing spiral waves and spouts of water. Geometry of the system, roughness, and turbulence are perhaps dominant in control of spiral flow.

Tedrow, J. C. F. & F. C. Ugolini (1963)
N.Z.J. Sci., 6 (1) : 150-6
An Antarctic saline lake

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Report of composition of the lake water and discussion of the origin of the salt.

King, S. F. (1962)
Spec. sci. Rep. U.S. Fish Wildl. Serv.—Fish., (399) : 1-22
Some effects of DDT on the guppy and the brown trout

F
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BA 40E (1) 410.

Briggs, M. H. (1962)
Life Sci., (11) : 649-51

F
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Further organic constituents of filtered lake waters

Analyses on the major components of the organic matter, and also on some minor constituents.

Satomi, Y. (1962)
Bull. Freshw. Fish. Res. Lab., Tokyo, 12 (1) : 65-74
(On the significance of alkalinity as an indicator of freshwater fishery production). Ni De

F
8-12136

Examination of data on the relation between alkalinity and yield and fish growth in various Japanese waters.

- Satomi, Y.** (1962) F
8-12137
Bull. Freshw. Fish. Res. Lab., Tokyo, 12 (1) : 43-9
 (Investigations on the alkalinity of freshwaters. 1. Method of estimation of alkalinity from dissolved weak acids excepting carbonic acid). *Ni De*

Discusses the alkalinity value derived from a formula representing the relation between alkalinity, hydrogen ion concentration and weak acids.

- Satomi, Y.** (1962) F
8-12138
Bull. Freshw. Fish. Res. Lab., Tokyo, 12 (1) : 51-63
 (Investigations on the alkalinity of freshwaters. 2. On the investigation values and their fluctuations in main Japanese lakes and rivers). *Ni De*

Tabulation of values obtained by various investigators studying Japanese waters since 1930, including data on horizontal and annual variation in values. Co 8-12137.

- Eldridge, E. F.** (1961) F
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Industr. Wat. Wastes, 6 : 150-1
 Freshwater monitoring problems

WPA 36 (4) 586. Includes the choice of sampling station, point of sample collection, adequacy and interval of sampling, analytical methods, bio-assay, and sources of pollution.

- Makarova, V. S.** (1960) F
8-12140
Gidrotekh. i Melior. (11) : 61-4
 (Reduction in evaporation from a free water surface by protection with a mononuclear film). *Ru*

WPA 36 (4) 609. Experiments using different alcohols.

- Makarova, V. S.** (1961)* F
8-12141
Literaturber. Wass. Abwass., (10) : 99
 (Reduction in evaporation from a free water surface by protection with a monomolecular film). *De*

De 8-12140.

- Meinke, W. W. et al.** (1962) F
8-12142
Water Wks Engng. (115) : 274-6, 300-1, 344-6
 Reducing reservoir evaporation by use of monomolecular films

WPA 36 (4) 610. Results of investigations at the Agricultural and Mechanical College of Texas.

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Agric. Engng, (42) : 240-3

Reducing reservoir evaporation with hexadecanol

WPA 36 (4) 611. An equation is presented which relates wind velocity to required rate of application of the chemical to maintain a continuous film.

Petrov, A. D. et al. (1961)

F
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Dokl. Akad. Nauk SSSR, 138 : 1395-9

(Alcohols and the protective properties of their monomolecular layers against evaporation in reservoirs). *Ru*

WPA 36 (4) 612. The properties of 11 alcohols and alcohol mixtures which could serve as alternatives to hexadecanol for reducing the evaporation of water in reservoirs were investigated.

Simmer, K. (1961)

F
8-12145

Bes. Mitt. dtsh. gewässerkr. Jb., (23) : 106 p.

Contribution to the determination of the laws of flow in natural waters

WPA 36 (4) 614. A detailed study of the factors governing the natural flow of streams. Deals with rainfall, extent and permeability of the drainage area, ground-water and surface run-off, and other factors.

Agababov, E. A. (1960)

F
8-12146

Vodosnabzh. sanit. Tekh., (10) : 45-8

(Tube for rate measurements in sharply curved streams). *Ru*

WPA 36 (4) 617. The design and operation are described of apparatus suitable for determination of rate and direction of flow in a shallow but winding current.

Agababov, E. A. (1961)*

F
8-12147

Literaturber. Wass. Abwass., 10 : 99

Tube for rate measurements in sharply curved streams

De 8-12146.

Ambühl, H. (1960)

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8-12148

Schweiz. Fisch Ztg, (7)

(Fish poisoning. Preservation of samples and first collections). *De*

WPA 36 (4) 679. Describes the methods of sampling and examination recommended in order to discover the cause of death of fish.

Razumov, S. A. (1962)

F
8-12149

Mikrobiol., Moskva, (30) : 764-8

Microbial indicators of organic pollution of waters by industrial effluents

WPA 36 (4) 685. Discusses *Cladotrix* and *Sphaerotilus*.

- Suzuki, S.** (1961) F
8-12150
Wat. Supply & Wastes, Japan, 3 (4) : 55-8
 Ecological studies on aquatic fungi in polluted rivers

WPA 36 (4) 687. Summarizes the results of a study to determine the effect of river pollution (by domestic sewage and industrial waste waters) on the distribution of aquatic fungi. The nitrogen and carbon metabolic requirements of common fungi are tested.

- Suzuki, S., H. Nimura & S. Suzuki** (1960) F
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J. Wat. Wks & Sew. Ass., Japan, 35 (313) : 85-8
 Ecological studies on the micro-organisms in a river polluted by confectionery wastes

WPA 36 (4) 688.

- Suzuki, S. & S. Suzuki** (1961) F
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Wat. Supply & Wastes, Japan, 3 (6) : 23-6
 Ecological studies on fungi and bacteria in a river polluted by a paper mill
- WPA 36 (4) 689.

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J. Wat. Wks & Sew. Ass., Japan, 35 (314) : 74-6
 Microbiological studies of sewage-polluted water: aquatic fungi and bacteria in the Kiryugawa River

WPA 36 (4) 690. Results of a study on the distribution of aquatic Phycomycetes and bacteria in this Japanese river.

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Proc. Mont. Acad. Sci., 22 : 54-81
 Effects of certain commercial fish toxicants on the limnology of three cold-water ponds, Montana

Describes effects of toxaphene, and rotenone bearing toxicants.

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In 8-03144 : 41-69
 Water balance of the Great Lakes system

Discusses importance of such studies, water budgets, precipitation, evaporation, energy budgets, future investigations.

- Csanady, G. T., H. K. Ellenton & R. E. Deane** (1963) F
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Nature, Lond., 196 (4861) : 1305-6
 Slicks on lake Huron

Describes observations on streaks of smooth water from which capillary waves are absent.

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Bull. Kobe Nar. Obs., (170) : 1-9

(On the heavy rainfall in Hyogo Prefecture). *Ni En*

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Port Washington, N.Y., Water Information Center, 7 p.

Water atlas of the United States

Maps contain data on physiographic provinces, average annual precipitation, areas of cloud seeding operations, mean annual evaporation, average temperature of groundwater, strontium concentration in streams, and the amount of water used for various purposes. Each map is accompanied by a few paragraphs of explanatory text.

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Linsley, R. K. (1963)

Science, 140 (3563) : 169

Water maps

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Andrews, J. T. (1963)

New Scient., 17 (332) : 702-5

Estimating the strength of lake ice

Study of the growth and development of lake ice is a matter of practical importance. Predicting the thickness of the ice from the meteorological conditions is greatly complicated by wide local variations in ice growth.

FG
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Radiol. Hlth Data, 4 (4) : 161-223

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Dokl. Akad. Nauk SSSR, 143 (2) : 479-82

Oplodotvoreníe i razvítie ikry belomorskoi sel'di *Clupea harengus pallasii* n. *maris-albi* Berg (var. a) v vode razlichnoi solenosti (Fertilization and development of eggs of *Clupea harengus pallasii* n. *maris-albi* Berg (var. a) in waters of different salinity)

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Chesapeake Sci., 4 (1) : 1-20

An annual phytoplankton cycle in the lower Chesapeake Bay

Describes seasonal changes in phytoplankton during 1960 based on data obtained on 24 cruises to five stations.

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Trud. vsesoiuz. nauch.-issled. Inst. morsk. ryb. Khoz., (43) : 150-76
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Science, 140 (3565) : 396-7
Radiolarians: Construction of spherical skeleton

Abstract of paper presented at the annual meeting of the National Academy of Sciences, Washington, D.C., 22-24 April 1963. Skeleton of spherical radiolarians, which consists basically of a network of hexagonally shaped structures, also contains some non-hexagonal structures.

- Sveshnikov, V. A. & Ts'iu Wên-jên** (1963) M
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Dokl. Akad. Nauk SSSR, 149 (3) : 738-41
Rostraria—lichinka *Notopygos* sp. (Amphinomidae, Polychaeta) iz Iuzhno-Kitaiskogo moria (Rostraria—a larva of *Notopygos* sp. (Amphinomidae, Polychaeta) from the South China Sea)

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New Scient., 18 (333) : 32-4
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Popular account of vernal plankton blooms.

- Osterberg, C., L. Small & L. Hubbard** (1963) M
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Nature, Lond., 197 (4870) : 883-4
Radioactivity in large marine plankton as a function of surface area

Salpa spp. and *Euphausia pacifica* shown to concentrate zinc-65, most of which originates at Hanford and reaches ocean by way of Columbia River. Animals used in three experiments were collected with a 6 ft. Isaacs-Kidd midwater trawl off the Oregon coasts.

- Plain, G. J. & K. E. Plain** (1963) M
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Nature, Lond., 197 (4872) : 1124-5
Decay and recovery of luminiscent ability in *Gonyaulax monilata*

Mathematical model is proposed to describe response of dinoflagellate to mechanical stimuli of 1/2-sec duration occurring at regularly spaced time intervals. The results of measurements are compared with the mathematical model.

Galkina, L. A. (1962)

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8-12170

PL-480 Int., 15 p.

Effect of salinity on the sperm, eggs and larvae of the Okhotsk herring

En 58-6935. Experiments carried out with sperm, eggs, and larvae of the herring which spawn in the northwestern part of the sea of Okhotsk show that the range of salinities tolerated by them without any changes in structure or behavior is very wide, but with quite well-defined limits. Effect of salinity is especially great during fertilization and hatching. Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

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Okeanologiya, 1 (4) : 670-8

(Influence of the oxygen deficit on the distribution of plankton in the Arabian Sea). *Ru*

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Deep-Sea Res., 9 : 523-30

Influence of the oxygen deficit on the distribution of plankton in the Arabian Sea

En 8-12171.

Mileikovskii, S. A. (1961)*

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Okeanologiya, 1 (4) : 679-87

(Character and nature of deep-water populations of eurybathic benthic forms of invertebrates with pelagic larvae taking as an example the Polychaeta *Euphrosyne borealis* Oersted 1843 from the North Atlantic). *Ru*

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Deep-Sea Res., 9 : 531-7

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Furuhashi, K. (1962)

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J. Mar. met. Soc., Kobe, 37 (2)

(On the distribution of some plankton animals in the Kuroshio region south of Honshu, Japan, with notes on the nature and origin of the cold water mass appearing in the region. 1. The distribution of copepods and chaetognaths). *Ni En*

Consideration of quantity of plankton; occurrence of copepods, chaetognaths and appendicularians and their indication of water masses, vertical distribution and seasonal fluctuation of these groups. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (8).

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J. Hokkaido Gakugei Univ., 12 (1) : 4-10
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 Ill. morphological descriptions. Issued also as: *Contr. Shirikishinai Mar Sta.* (9).
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 Additions to the Mysidacea of Kerala
 Ill. morphological description of 12 spp., of which 6 are new, with keys to some of the genera to which these spp. belong.
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- Balakrishnan, K. P.** (1961)
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 Fish eggs and larvae collected by the research vessel 'Conch' during 1958-61. 1. Larvae of *Cynoglossus semifasciatus* Day
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 Observations on the genus *Ratania* (Copepoda) with a description of the type species

Ill. morphological description of female and male specimens.

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- B.J.M.** (1963)
Aust. nat. Hist., 14 (5) : 164
 Rare whale washed up on Sydney beach

Note of an adult male strap-toothed whale (*Mesoplodon layardi*) washed up on a beach at 33° 41' S, 151° 17' E.

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 (The biological basis of acclimatization of mysids in the Aral Sea and certain other brackish waters). *Ru*

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- Wetzel, R. G.** (1963)
Nature, Lond., 197 (4871) : 1026-7
 Primary productivity of periphyton

Difficult problem of assaying biomass and rates of colonization by periphyton in fresh and saline waters has been recognized. Common method used involved measurement of rates of colonization by periphyton on artificial substrata. Literature on this subject recently reviewed by Cooke and Sládečková. Technique utilizing carbon-14 as a tracer was developed for assaying the *in situ* productivity of periphyton *in situ* in lakes and in ponds. Primary productivity of littoral periphyton was determined in a large, saline lake, Borax Lake, of northern California in 1961-62.

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- Cassie, R. M.** (1963)
N.Z.J. Sci., 6 (1) : 36-59
 Multivariate analysis in the interpretation of numerical plankton data

Two techniques of multivariate analysis (component analysis, and discriminant analysis) are examined with a view to their use in interpretation of quantitative plankton data. Both methods are applied to a specific example, a horizontal sampling traverse from Cook Strait into Wellington Harbour on an incoming tide.

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 A small towed net for ocean surface sampling

The small ocean surface described consists essentially of a 200-mesh nylon net supported by a pair of plastic floats and measuring just over 2 ft. long. When streamed from a ship it samples only the top centimetre of water.

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Three samples from water near the edge of the lake.

- Bayly, I. A. E.** (1962) F
8-12189
Aust. J. Mar. Freshw. Res., (13) : 143-97
Ecological studies on New Zealand lacustrine zooplankton with special reference to *Boeckella propinqua* Sars (Copepoda : Calanoida)

WPA 36 (4) 582. Results of a study in a small, warm, monomictic, closed, alkaline lake on Mayor Island, off the coast of North Island, New Zealand. Data on morphometry, temperature, and chemical conditions are given, and the vertical distribution of zooplankton biomass and of different planktonic crustacean species at different times of the year are discussed. Aspects affecting the distribution of *Boeckella* are discussed and the zooplankton of this lake are compared with those in a number of lakes on the mainland of New Zealand.

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Literaturber. Wass. Abwass., (10) : 105-6
Investigations on the distribution of plankton with the help of the underwater telescope and the echograph

WPA 36 (4) 583. Describes investigations into the distribution of plankton in Black Forest lakes.

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Dokl. Akad. Nauk SSSR, 149 (5) : 1182-4
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- Willoughby, L. G.** (1962) F
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J. Ecol., 50 (3) : 733-59
The occurrence and distribution of reproductive spores of Saprolegniales in fresh water

Method developed for quantitative estimation of propagules of saprolegniaceous fungi aliquot water samples were incorporated in solid nutrient media and incubated under water. Estimations were made from surface water only, at Windermere Lake. *Saprolegnia* was most conspicuous genus, followed by *Achlya* and *Aphamomyces*. *Dictyuchus* and *Leptolegnia* were obtained occasionally.

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Mikrokosmos, 49 : 4-7
Planktonuntersuchungen an den Krieckenbecker Seen (Plankton investigations in the Krieckenbecker lakes)

Ill. description of phytoplankton.

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Int. Rev. Hydrobiol., 44 : 277-98

Beziehungen zwischen dem Chemismus und der Phytoplanktonentwicklung
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Three species of Cumacea from the lakes of Kerala

Ill. morphological description of 2 new spp. to which a name is given of
another sp. of which specific identification will later be attempted.

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Zool. Mag., Tokyo, 71 (10) : 337-8

(Effect of X-irradiation on hatchability of *Oryzias embryos*). *Ni En*

Experimental measurements of survival and development of embryos
exposed to various levels of irradiation.

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Nature, Lond., 197 (4866) : 512

Effect of certain environments on the carapace of the freshwater ostracod
Cypridopsis vidua (Müller)

Reports on the effect of environment of the shell of an organism in an
attempt to elucidate a micropalaeontological aspect. Original material was
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Studies on the biology of the pink shrimp, *Penaeus duorarum* Burkenroad,
in Everglades National Park, Florida

Methods; postlarvae abundance and movement; juveniles abundance, sex
ratio, length-weight relationship, mortality, length-frequency; growth,
movement by tagging, distribution in relation to salinity. Other penaeid
spp.

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New Scient., 15 (306) : 695-6

The brain of the octopus

Re 62-06667.

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Dokl. Akad. Nauk SSSR, 143 (4) : 968-71

Kolichestvennoe raspredelenie donnoi makrofauny v Chernom more u beregov Kavkaza (Quantitative distribution of bottom macrofauna in the Black Sea near the shores of the Caucasus)

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Science, 136 (3522) : 1121-2
Aragonite in the resilium of oysters

Orthorhombic CaCO_3 composes some of fibers of *Crassostrea virginica* Gmelin.

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Science, 137 (3526) : 279-80
Goethite in radular teeth of recent marine gastropods

X-ray diffraction patterns of denticle material. Species of *Scissurella*, *Perotrochus*, *Haliotis*, *Acmaea*, *Patella*, *Nomaeopelta*, *Lottia*, *Fissurella*, *Diadora*, *Nerita*, *Tegula* and *Littorina* were selected for study.

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J. Fish. Res. Bd Can., 19 (3) : 505-10
Biosynthesis of trimethylammonium compounds in aquatic animals.
3. Choline metabolism in marine Crustacea

Incorporation *in vivo* of radioactivity into phospholipid-bound choline studied in *Homarus americanus* following intramuscular administration of Na-formate- C^{14} , glycine-2- C^{14} , DL-serine-3- C^{14} , L-methionine-methyl- C^{14} and choline-methyl- C^{14} . Choline-methyl- C^{14} was administered to *Cancer magister*. Co 62-02043, Ci 61-11416.

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8-12204
J. Fish. Res. Bd Can., 19 (3) : 401-8

The occurrence of the king crab, *Paralithodes camtschatica* (Tilesius), and of *Lithodes aequispina* Benedict in British Columbia

Locality records are given of capture of a number of crabs. Extension of the known range of *Lithodes aequispina* to southern British Columbia is reported. As species can be easily confused, figures and anatomical comparisons are provided.

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Echinodermes de La Guyane Française (Crinoides, Astérides, Ophiurides, Echinides, Holothurides) (4^e Note) (Echinoderms of French Guiana (Crinoidae, Asteridae, Ophiuridae, Echinidea, Holothuria) (4th Note))

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- Preliminary note based on aquarium experiments where five larval stages are described and the effects of food on the development processes are discussed.
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Nature, Lond., 196 (4852) : 351-2
 Respiratory and swimming movements in the cephalopod *Cranchia scabra*
- During cruise on ' Discovery II ' in May-Jun. 1962 observations were made on a living specimen, member of ogopsid family Cranchiidae. Squids of this family differ from all other families in having a horizontal partition across mantle cavity which is fused to the ventral midline of the enlarged coelome and to the mantle.
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 Size relations of two instars of the blue crab, *Callinectes sapidus*
- M
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- Grant, G. C. (1963)**
Chesapeake Sci., 4 (1) : 38-42
 Chaetognatha from inshore coastal waters off Delaware, and a northward extension of the known range of *Sagitta tenuis*
- Five species of chaetognaths are identified from a series of plankton samples taken from inshore coastal waters off Delaware in the fall, winter and spring of 1960-1961. They were *Sagitta serratodentata*, *S. elegans*, *S. minima*, *S. hispida*, and *S. tenuis*. All except *S. tenuis* had previously been reported from the waters of the Delaware Bay region.
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Science, 139 (3556) : 755-8
 Genetic control of hemerythrin specificity in a marine worm

Biochemical polymorphism of coelomic hemerythrin found in sipunculid *Golfingia gouldii*. All individuals have same vascular hemerythrin, which is electrophoretically different from any of the coelomic hemerythrins. Vascular and coelomic hemerythrins of another sipunculid, *Dendrostomum cymodoceae*, have quite different "fingerprints". Embryological and phylogenetic implications are discussed.

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Tremoctopus violaceus uses *Physalia* tentacles as weapons

Immature octopods found with fragments of tentacles of coelenterate attached to the suckers of dorsal arms. Probable method of acquisition, evidence of adaptation for holding the tentacles, and possibility that the octopod uses these as offensive and defensive weapons are discussed.

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Aust. nat. Hist., 14 (1) : 24-7
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Melo umbilicatus, *M. miltonis* and *M. amphora*, appearance and egg production.

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Acta adriat., 10 (1) : 11 p.

Odnos sadržaja fizoda i reduktivnih supstanca u nekim jadranskim srednjim algama (Relation between the amount of physodes and reducing compounds in some Adriatic brown algae). *En*

Studies of *Cystoseira*, *Fucus*, *Sargassum*, *Dictyota*, *Dictyopteris*, *Padina*, *Halopteris*, *Laminaria*, spp.

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 (Determination of the length of maintenance time with the copulatory traces in stomach of the common squid). *Ni En*

Measurement of the rate at which copulatory traces (empty sperm bulbs and spermatophoric sacs) disappear from the stomach; the work was carried out on 500 individuals kept alive under laboratory conditions.

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A bathypelagic pycnogonid

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Exp. Cell. Res., 27 : 250-9
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Shokuhin Eiseigaku Zasshi, 3 : 273-7
 Poison in *Chlamys nipponensis*

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 Free glycerol in dormant cysts of the brine shrimp *Artemia salina*, and its disappearance during development

Includes data on carbohydrate contents of cysts up to 28 years of age.

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Yaldwyn, J. C. (1963)
Aust. nat. Hist., 14 (5) : 149-52
Deep-sea prawns—their colour and luminescence

Semi-popular article on the production of light by these organisms and on the chemistry and functions of bioluminescence.

MF
8-12233

McNeill, F. (1962)
Aust. nat. Hist., 14 (2) : 37-43
Crabs of the Sydney foreshores

Illustrated ecological notes on crabs of coastal rock-platforms and beaches, sand-floored tidal flats, and mud and mangrove foreshores.

MF
8-12234

Pope, E. C. (1962)
Aust. nat. Hist., 14 (1) : 3-11
New Caledonia, the coral-ringed island

Popular account of a visit to the island with notes on fauna.

MF
8-12235

Millar, R. H. & P. J. Hollis (1963)
Nature, Lond., 197 (4866) : 512-3
Abbreviated pelagic life of Chilean and New Zealand oysters

Short notice reporting observations on *O. chilensis* Philippi from Chile and on the New Zealand mud oyster, *O. lutaria* Hutton.

MF
8-12236

Walne, P. R. (1963)
Nature, Lond., 197 (4868) : 676
Breeding of the Chilean oyster (*Ostrea chilensis* Philippi) in the laboratory

Reports results of experiments in the Conway Laboratory. The temperature at which breeding occurs is lower than required by *O. edulis*, and this could result in an earlier production of spat. *O. chilensis* might be suitable only for the cooler waters of the British Isles.

MF
8-12237

Johnson, R. I. (1963)
J. Soc. Bibl. nat. Hist., 4 (2) : 92-5
The arrangements and contents of the genera described in J. C. Chenu's "Illustrations conchyliologiques" (1843-53)

Tabulation showing the alphabetical order in which genera appear in certain sets of this publication and their order in the copy in the British Museum.

- Bruno, M. S.** (1962) F
8-12238
Comp. Biochem. Physiol., 6 (1) : 41-6
 Spectral sensitivity of photoreceptor neurons in the sixth ganglion of the crayfish
- BA 40E (1) 4133. The spectral sensitivity function for the photosensitive neurons found in the sixth abdominal ganglion of the crayfish (*Procambarus clarkii*) has been determined using monochromatic stimuli.
- Rushforth, N. B., A. L. Burnett & R. Maynard** (1963) F
8-12239
Science, 139 (3556) : 760-1
 Behavior in *Hydra*: Contraction responses of *Hydra pirardi* to mechanical and light stimuli
- Lee, R. M.** (1963) F
8-12240
Science, 139 (3559) : 1048-9
 Conditioning of a free operant response in Planaria
- Account of experiments on learning in *Cura foremani*.
- Holm-Hansen, O.** (1963) F
8-12241
Science, 139 (3559) : 1059-60
 Algae: Nitrogen fixation by antarctic species
- Examines algae from terrestrial and fresh-water habitats. Finds *Nostoc commune* the only sp. capable of growing in nitrogen-free medium. Discusses importance of nitrogen fixing algae to terrestrial life.
- Van der Borgh, O.** (1963) F
8-12242
Nature, Lond., 197 (4867) : 612-3
 Accumulation of radium-226 by the freshwater gastropod *Lymnaea stagnalis* L.
- Öktay, M. & A. Sengün** (1963) F
8-12243
Nature, Lond., 197 (4867) : 613-4
 Incorporation of iron-59 into the cells of different tissues of *Chironomus plumosus*
- Lind, E. M. & S. A. Visser** (1962) F
8-12244
J. Ecol., 50 (3) : 599-613
 A study of a swamp at the north end of lake Victoria
- Investigation undertaken to elucidate habitat factors which may control distribution of two major types of swamp vegetation.
- Ellis, A. E.** (1962)* F
8-12245
 London, Linnean Society, 92 p.
 British freshwater bivalve molluscs

- Applegate, H. G.** (1963) F
8-12246
Nature, Lond., 196 (4859) : 1117
 Effect of halogenated benzoic acids on *Elodea densa*
- Trukhin, N. V.** (1963) F
8-12247
Dokl. Akad. Nauk SSSR, 149 (6) : 1450-2
 Vliianie temperatury v svetovoi optimum rosta *Chlorella pyrenoidosa*
 (Light optimum for the growth of *Chlorella pyrenoidosa* as affected by
 temperature)
- Kamemoto, F. I., S. M. Keister & A. E. Spalding** (1962) F
8-12248
Comp. Biochem. Physiol., 7 (1-2) : 81-7
 Cholinesterase activities and sodium movement in the crayfish kidney
 CA 48 (4) : 3711.
- Jaeger, C. P.** (1962) F
8-12249
Comp. Biochem. Physiol., 7 (1-2) : 63-9
 Physiology of Mollusca. 3. Action of acetylcholine on the penis retractor
 muscle of *Strophocheilos oblongus*
 Co 8-09228. CA 58 (4) : 3714.
- Sager, R., I. B. Weinstein & Y. Ashkenazi** (1963) F
8-12250
Science, 140 (3564) : 304-6
 Coding ambiguity in cell-free extracts of *Chlamydomonas*
 Prepares a cell-free system that incorporates amino acids into polypeptide
 from extracts of this alga. The addition of polyuridylic acid to this system
 stimulates the incorporation both of phenylalanine and of leucine.
- Moore, J. J.** (1962) G
8-12251
J. Ecol., 50 (3) : 761-9
 The Braun-Blanquet system: a reassessment
 Review and reappraisal of a concept of plant community classification.

FISHING

- Rass, T. S.** (1961) M
8-12252
Vop. Ikhtiol., 1 (4) : 622-39
 Nekotorye puti uvelicheniia ulovov ryby v morskikh vodoemov (Some
 ways of increasing the catch of fish in seas of the USSR)
 BA 40E (1) 427.

- Rass, T. S.** (1962)* M
8-12253
Referat. Zh. (Biol.) (En Transl.), (8I97)
Some ways of increasing the catch of fish in seas of the USSR
En 8-12252.
- Tambovtsev, B. M.** (1961) M
8-12254
Nauch.-tekh. Biull. PINRO, 2/3 (16/17) : 55
O promysle belomorskoi sel'di v 1960 g. (The catch of White Sea herring in 1960)
BA 40E (1) 436.
- Tambovtsev, B. M.** (1962)* M
8-12255
Referat. Zh. (Biol.) (En Transl.), (8I100)
The catch of White Sea herring in 1960
En 8-12254.
- Anon.** (1963) M
8-12256
Norsk Hvalfangst-tid., 52 (3) : 72-8
Catch reports 1962/63. *En* No
- Table showing some whale and sperm oil reports from the pelagic expeditions which are operating in the Antarctic in the season 1962/63 compared with the production in the corresponding periods in the season 1961/62.
- Anon.** (1963) M
8-12257
Norsk Hvalfangst-tid., 52 (3) : 81
Catch reports. The summer season 1962
Catch reports received from whaling companies operating on fields outside the Antarctic in the season 1962.
- Kukucz, J. T.** (1962) M
8-12258
Fish. News int., 1 (5) : 55-6
Some figures on tuna
Reviews recent world catch and trade statistics.
- Anon.** (1963) M
8-12259
Fish. Newslett. Aust., 22 (3) : 21, 27
Australian salmon No. 2 fish in 1961-62
Statistics of Australian catch of fish.

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- MF
8-12260
- Voskresensky, N.** (1962)
Fish News int., 1 (5) : 9-13
Utilization of fish in the Soviet Union
- Short review of status of fishing industry.
- MF
8-12261
- Kirby, E. S.** (1962)
Fish. News int., 1 (5) : 16-20
Model fishery development in Taiwan
- Reviews resources, production, industrial organization, fish cultural activities, marketing, etc.
- MF
8-12262
- Langelyth, J.** (1962)
Fish. News int., 1 (5) : 42-3
Stability in Swedish fisheries
- Reviews status of Swedish fishing industry.
- MF
8-12263
- Anon.** (1962)
Fish. News int., 1 (5) : 69-70
Egypt develops neglected fisheries
- Briefly comments on Red Sea exploration, the Nile Delta fish farms, proposed fisheries in Nasser Lake (Aswan) and the Qattara Depression, under current 5-year fisheries development plan.
- F
8-12264
- Anon.** (1963)
New Scient., 18 (333) : 30
Electric 'fence' for fish
- Electric barrier installed at power station on river Maas at Buggenum, Holland, to protect fish and to prevent intake filters to condenser for cooling water of turbo-generators from becoming blocked with their dead bodies.
- MF
8-12265
- Andreev, A. K.** (1962)
Dokl. nauch. Sess. iakutsk. Fil. Akad. Nauk SSSR, 15 : 183-6
(Fish muscle maltase). *Ru*
- CA 58 (4) : 3707.
- G
8-12266
- Maita, Y., Y. Ishihara & T. Saito** (1962)
Bull. Fac. Fish. Hokkaido, 13 (1) : 1-7
(Inhibiting action of carrageenin on crystalline swine pepsin). *Ni En*

AQUATIC STOCKS

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M
8-12267

Lubny-Gertsyk, Ie. A. (1962)
Priroda, Moskva, (2) : 113-4
Pelagicheskii lantsetnik (The pelagic lancelet)

BA 39E (6) 25496. During a voyage of the 'Vityaz' in 1959-1960, 24 specimens of *Amphioxides pelagicus* were caught, most of them in the mid-Pacific and northeast of Australia, at depths down to 500 m. The author describes their morphology and distribution.

M
8-12268

Caldwell, D. K. (1962)
Contr. Sci. Los Angeles Co. Mus., (53) : 1-10
Postlarvae of the blue marlin, *Makaira nigricans* from off Jamaica

BA 39E (6) 25500.

M
8-12269

Svetovidov, A. N. (1961)
Zool. Zh., 40 (9) : 1335-44
O Proiskhozhdenii nekotorykh amfiboreal'nykh treskovykh v sviazi s sostavom ikh parazitofauny (The origin of some amphiboreal gadids and clupeids as related to the make-up of their parasitic fauna)

BA 39E (6) 25510.

M
8-12270

Svetovidov, A. N. (1962)*
Referat. Zh. (Biol.) (En Transl.), 4I22)
The origin of some amphiboreal gadids and clupeids as related to the make-up of their parasite fauna

En 8-12269.

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8-12271

Radakov, D. V. (1961)
Trud. Inst. Morf. Zhiv., 39 : 47-71
Ob osobennostiakh oboronitel'nogo povedeniia stai nekotorykh pelagicheskikh ryb (Specific features of the defensive behavior of schools of some pelagic fish)

BA 40A (1) 338.

M
8-12272

Radakov, D. V. (1962)*
Referat. Zh. (Biol.) (En Transl.), (8I50)
Specific features of the defensive behaviour of schools of some pelagic fish

En 8-12271.

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8-12273
- Baranenkova, A. S. (1960)**
Nauch.-tekhn. Biull. PINRO, 3 (13) : 15-20
 Rezul'taty ucheta molodi treski i pikshi v Barentsevom more zimoi 1959/1960 godov (The results of a count of young cod and haddock in the Barents Sea during the winter of 1959-1960)
 BA 40E (1) 389.
- M
8-12274
- Baranekova, A. S. (1962)***
Referat. Zh. (Biol.) (En Transl.), (8I98)
 The results of a count of young cod and haddock in the Barents Sea during the winter of 1959-1960
En 8-12273.
- M
8-12275
- Baranenkova, A. S. (1961)**
Nauch.-tekhn. Biull. PINRO, 2/3 (16/17) : 10-3
 K metodike issledovaniia rannikh stadii promyslovykh ryb (A method for studying the early stages of commercially valuable fishes)
 BA 40E (1) 390. Voyages were made in April and May and also in June and July of 1959 and 1960 to study patterns of distribution of larvae of different species of fishes in the North Atlantic and to establish methods for counting them.
- M
8-12276
- Baranenkova, A. S. (1962)***
Referat. Zh. (Biol.) (En Transl.), (8I1)
 A method for studying the early stages of commercially valuable fishes
En 8-12275.
- M
8-12277
- Johnson, J. H. (1962)**
Trans. Amer. Fish. Soc., 91 (3) : 269-74
 Sea temperatures and the availability of albacore off the coasts of Oregon and Washington
 BA 40E (1) 408. Wide variations which occur in Pacific Northwest albacore (*Thunnus germo*) landings are examined under a hypothesis that annual variations in sea surface temperatures affect the success of fishing.
- M
8-12278
- Bern, H. A., C. C. de Roos & E. G. Biglieri (1962)**
Gen. comp. Endocr., 2 : 490-4
 Aldosterone and other corticosteroids from chondrichthyan interrenal glands
 Account of experiments on *Squalus acanthias*, *Raja rhina* and *Hydrolagus coliei*, designed to determine the effects of various incubation media and temperatures on the interrenal tissue *in vitro*.

- Fish, M. P. & W. H. Mowbray** (1962) M
8-12279
J. Mar. Res., 20 (2) : 149-62

Production of underwater sound by the white whale or beluga, *Delphinapterus leucas* (Pallas)

Behavior of 3 captive specimens observed for prolonged periods and sound production recorded. Sonic and physical activities were correlated, and sounds are compared with those of other cetaceans, especially *Tursiops*. Physical analyses for representative sounds presented for 47-minute recording period.

- Anon.** (1962) M
8-12280
France Pêche, 7 (64) : 79-80

Fiche technique de la taupe et du peau bleue (Fishery cards of *Lamna cornubria* and *Carcharius glaucus*)

Detachable cards, ill., giving biology, habitat, fishing, catch, commercial use of *Lamna cornubria* and *Carcharias glaucus*.

- Aasen, O.** (1962) M
8-12281
Fiskets Gang, (37) : 5 p.

Norske pigghåmerkinger 1958-61 (Norwegian spiny dogfish marking 1958-61)

Considers the Norwegian taggings of spiny dogfish for the period 1958-61, and presents main results.

- Klawe, W. L.** (1962) M
8-12282
Ciencia, Méx., 21 (4) : 180

Bonito juvenil (*Sarda chiliensis*) en las aguas del sur de Baja California (Juvenile bonito, *Sarda chiliensis*, in the waters of Baja California)

Ci 59-5364, 61-12830, 62-00952 and 62-01468. Note on specimen captured 5 Apr. 1960.

- Ximénez, I.** (1962) M
8-12283
Rev. Inst. Invest. pesq. Fac. Vet., Montevideo, 1 (1) : 35-44

Notas sobre elasmobranchios—1. Cuadro sistemático y sinonímico provisional de los seláceos de la costa uruguaya (Notes on Elasmobranchii—1. Systematic list and provisional synonymy of the sharks of the Uruguayan coast)

A list incl. a key to the identification of spp.

Vaux, D. (1962)

M
8-12284

Spec. Rep. sth. pelag. Proj. C.S.I.R.O., (2) : 9 p.

Results of tuna search programme, 1961

Programme conducted on New South Wales coast in 1961-62. Report is summary of all information gathered through the control centre and from such log books as have been made available to CSIRO.

Anon. (1962)

M
8-12285

Mondo sommerso, 4 (10) :

Atlante dei pesci delle coste italiane (Fish atlas of the Italian coasts)

Detachable cards, ill., with notes on morphology, reproduction, nutrition and geographical distribution of *Cepola rubescens* L., *Torpedo nobiliana* Bonaparte, *Blennius sphinx* Cuvier & Valenciennes, *B. pavo* Risso.

Ansell, A. D. (1962)

M
8-12286

New Scient., 14 (288) : 408-9

An approach to sea farming

Progress report on experiments using flue gas from power station and fertilizers to promote growth of marine algae (*Phaeodactylum*) shows it promises to be an efficient way of producing food. Clams, *Venus mercenaria*, are now being fed with the algae to convert the crop into a more nutritious and palatable form.

Bohl, H. (1961)

M
8-12287

ICES, Comparative Fish. Comm., No. 88, mimeo, 11 p.

German mesh selection experiments on redfish 1961

'Anton Dohrn' cruise, July-August, to Denmark Strait. Trawl cod-ends were perlon or manila, double braided or knotless single. Covered cod-end experiments. Special reference to meshing problem and relation of numbers and sizes of meshed fish to size of catch. Variability of mesh size within knotless cod-ends.

Frade, F. & H. Vilela (1962)

M
8-12288

Estud. Jta. Invest. Ultramar, (98) : 92 p.

Le thon rouge et le germon *Thunnus thynnus* (L.) et *Germo alalunga* (Bonn.) morphologie, biologie et pêche (The bluefin tuna and the albacore *Thunnus thynnus* (L.) and *Germo alalunga* (Bonn.) morphology, biology and fisheries). *Fr En*

Do 60-181me. Synopsis of biological data containing information on systematics, distribution, bionomics and life history, populations and exploitation. Contains also a summary of discussion and recommendations of the symposium on Thunnidae, Dakar, 12-17 Dec. 1960.

- Berger, T. S., B. A. Popov & R. A. Cheremisina** (1962) M
8-12289
Dokl. Akad. Nauk SSSR, 143 (4) : 965-7
 Novye dannye o severnoi granitse rasprostraneniia molodi treski, pikshi, okunia i sel'di v Barentsevom more (Recent data on the northern limits of distribution area of young cod, haddock, redfish and herring in the Barents Sea)
- Burtsev, I. A.** (1962) M
8-12290
Dokl. Akad. Nauk SSSR, 144 (6) : 1377-9
 O vosproizvoditel'noi sposobnosti gibrida osetra so sterliad'iu (On the reproductive ability of the hybrid between *Acipenser guldenstaedtii* and *A. ruthenus*)
- Kolosova, A. A.** (1962) M
8-12291
Dokl. Akad. Nauk SSSR, 145 (5) : 1148-50
 Afferentnaia innervatsiia serdtsa chernomorskikh akul i skatov (Afferent heart innervation in Black Sea sharks and rays)
- Anokhina, L. E.** (1962) M
8-12292
Dokl. Akad. Nauk SSSR, 142 (6) : 1412-5
 Nekotorye voprosy plodovitosti sel'di Onezhskogo zaliva (Some aspects of the fertility of herring in the Onega Bay)
- Bogdanov, G. A.** (1962) M
8-12293
Dokl. Akad. Nauk SSSR, 144 (3) : 652-5
 Izmeneniia faktora zhirnosti belomorskoii sel'di v sviazi s sostoianiem polovykh produktov (Variations of the fatness factor of the White Sea herring in connexion with the state of its sexual products)
- Vartapetian, B. B.** (1962) M
8-12294
Dokl. Akad. Nauk SSSR, 143 (3) : 721-3
 Skorost' vodoobmena u morskoi kostostoi ryby (The rate of water metabolism in marine teleostei fish)
- Tibbo, S. N.** (1962) M
8-12295
J. Fish. Res. Bd Can., 19 (3) : 517-8
 New records for occurrence of the white-tip shark, *Pterolamiops longimanus* (Poey), and the dolphin, *Coryphaena hippurus* L., in the Northwest Atlantic
Pterolamiops caught near eastern edge of Georges Bank on 10 Oct. 1961 from 'A. T. Cameron' on a surface line trawl using mackerel as bait. In same area and date *Coryphaena* caught with handlines.

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Bell, G. (1962)

M
8-12296

J. Fish. Res. Bd Can., 19 (3) : 515-6

Trichodinids from the gills of a new host the lingcod *Ophiodon elongatus*

October 1960 mortalities of "jigged" lingcod held in livewells.

Thomson, J. A. (1962)

M
8-12297

J. Fish. Res. Bd Can., 19 (3) : 497-500

On the fecundity of Pacific cod (*Gadus macrocephalus* Tilesius) from Hecate Strait, British Columbia

Egg counts on 46 mature females. Log-log relationship between egg number and body length. Little difference in number of eggs per unit body length, between cod from Hecate Strait and stocks from colder regions of the Pacific to the north and west. Comparison fish from Hecate Strait and west Kamchatka shows that former mature at a much smaller size. Since egg number is related to size, it is concluded that cod stocks of Hecate Strait have a much lower reproductive potential than do other populations in the North Pacific.

Fridriksson, A. (1963)

M
8-12298

Ann. biol., Copenhagen, 18 (1961) : 210 p.

Contains series of short papers dealing with hydrography, plankton and benthos, and fish in the various sub-areas of the N.E. Atlantic; incl. chairmen's summaries of sub-area reports to ICES, and a general introduction by the Secretary-General; main spp. dealt with are herring, cod, haddock, whiting, redfish, plaice, soles, salmon, trout, oysters, tuna, sardines, mackerel and sprats. Authors are: J. Jónsson, E. Bertelsen, W. Cieglewicz, E. Bratberg, F. Hermann, U. Stefansson, G. Dietrich, A. P. Alekseyev, B. V. Istoshin, L. R. Shmarina, A. G. Kislyakov, L. I. Borovaya, J. Smed, R. E. Craig, H. Thomsen, A. Svansson, R. B. Burns, R. Johnston, A. Glowinska, A. E. Antonov, J. Krey, A. A. Degtyaryova, E. A. Pavshits, S. S. Drobicheva, G. T. D. Henderson, T. Lovegrove, J. H. Fraser, J. A. Adams, R. S. Glover, J. M. Colebrook, G. A. Robinson, M. H. Williamson, Z. Ringer, I. I. Nikolaev, S. O. Apiné, H. K. Krieves, J. Corlett, P. M. Hansen, A. D. McIntyre, G. Krefft, Aa. J. C. Jensen, O. Aasen, P. F. Meyer-Waarden, B. B. Rae, J. M. Lamont, R. Kändler, Z. Reimann, A. Peczalska, A. Kotthaus, U. Schmidt, A. S. Baranenkova, A. Meyer, V. P. Ponomarenko, St. Rutkiewicz, G. B. Grauman, M. A. Sonina, R. Jones, R. W. Blacker, R. Gambell, B. B. Parrish, O. Dragesund, J. Jakobsson, O. J. Østvedt, F. Devold, I. G. Yudanov, A. Saville, K. Tiews, I. G. Baxter, G. McPherson, K. Schubert, K. H. Postuma, J. J. Zijlstra, Ch. Gilis, J. Popiel, K. Gundersen, J. Hamre, W. G. Hartley, I. Drzyeński.

Konstantinov, K. G. (1962)*

M
8-12299

Referat. Zh. (Biol.) (En Transl.), (8148)

Marking benthic fishes in the Barents Sea (Supplemented text of a report read at a joint meeting of Soviet and Norwegian scientists in Aug. 1958)

En 8-12298.

- Shul'man, G. E. & V. F. Demidov** (1961) M
8-12300
Zool. Zh., 40 (10) : 1532-5

Izmenenie zhirnosti sardiny (*Sardinella aurita* Valenciennes) raiona Dakara v prednerestovyi period godovogo tsikla (Variations in fatness of the Dakar sardine (*Sardinella aurita* Valenciennes) during the prespawning period of the annual cycle). En

BA 40E (1) 433.

- Shul'man, G. E. & V. F. Demidov** (1962)* M
8-12301
Referat. Zh. (Biol.) (En Transl.), 6170

Variations in fatness of the Dakar sardine (*Sardinella aurita* Valenciennes) during the prespawning period of the annual cycle

En 8-12300.

- Lund, W. A., Jr.** (1961) M
8-12302
Bol. Inst. esp. Oceanogr., 1 (1) : 73-129

A racial investigation of the bluefish, *Pomatomus saltatrix* (Linnaeus) of the Atlantic coast of North America. Es

BA 40E (1) 4214.

- Netsch, N. F. & A. Witt, Jr.** (1962) M
8-12303
Trans. Amer. Fish. Soc., 91 (3) : 251-62

Contributions to the life history of the longnose gar (*Lepisosteus osseus*) in Missouri

BA 40E (1) 4219. The age and growth, reproduction, experimental growth, and metabolic studies of young-of-the-year longnose gar are discussed.

- Peyraud, C. & R. Labat** (1962) M
8-12304
Hydrobiologia, 19 (4) : 351-6

Réactions cardio-respiratoires observées chez la sole au cours de l'enselement (Cardio-respiratory reactions observed when the sole buries itself in sand)

BA 40E (1) 4221. Electrocardiographs and traces of opercular movements of fish (*Solea solea* L.) in various stages of being buried are given.

- Savvaitova, K. A.** (1961) M
8-12305
Zool. Zh., 40 (11) : 1696-703

O sistematicheskom polozhenii kamchatskikh gol'tsov roda *Salvelinus* (The taxonomic status of Kamchatka chars of the genus *Salvelinus*). En

BA 40E (1) 4223. Two spp. of chars live in Kamchatka waters: *S. leucomaenis* and *S. malma* (Walb.), described for the Pacific Ocean province of the Holarctic region, are synonyms for *S. alpinus*.

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8-12306

Savvaitova, K. A. (1962)*

Referat. Zh. (Biol.) (En Transl.), 817

The taxonomic status of Kamchatka charrs of the genus *Salvelinus*

En 8-12305.

M

8-12307

Papermaster, B. W., R. M. Condie & R. A. Good (1962)

Nature, Lond., 196 (4852) : 355-7

Immune response in the California hagfish

Since it is the first in phylogenetic scale with formed, circulating red blood cells and haemocytopoietic tissue in submucosa of gut tract, definition of response seemed particularly relevant to investigation of phylogeny of immune responsiveness of *Eptatretus stoutii*.

M

8-12308

Massmann, W. H. (1963)

Chesapeake Sci., 4 (1) : 54-6

Annulus formation on the scales of weakfish, *Cynoscion regalis*, of Chesapeake Bay

M

8-12309

Massmann, W. H. (1963)

Chesapeake Sci., 4 (1) : 43-51

Age and size composition of weakfish, *Cynoscion regalis*, from pound nets in Chesapeake Bay, Virginia 1954-1958

M

8-12310

Hoffman, R. A. (1963)

Chesapeake Sci., 4 (1) : 30-7

Accessory glands and their ducts in the reproductive system of the male toadfish, *Opsanus tau*

M

8-12311

Hoffman, R. A. (1963)

Chesapeake Sci., 4 (1) : 21-9

Gonads, spermatid ducts, and spermatogenesis in the reproductive system of male toadfish, *Opsanus tau*

M

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Zool. Zh., 40 (10) : 1516-31

Stenofagiia i evrifagiia u ryb podsemeistva Gobioninae (Stenophagia and euryphagia among fish of the subfamily Gobioninae)

BA 40E (1) 4224.

Spanovskaya, V. D. (1962)* F
8-12400
Referat. Zh. (Biol.) (En Transl.), 5I20

Stenophagia and euryphagia among fish of the subfamily Gobioninae

En 8-12399.

Strawn, K. (1961) F
8-12401
Tex. J. Sci., 13 (2) : 127-59

A comparison of meristic means and variances of wild and laboratory-raised samples of the fishes, *Ethostoma grahami* and *E. lepidum* (Percidae)

BA 40E (1) 4226.

Stevens, E. D. & O. W. Tiemeier (1961) F
8-12402
Trans. Kans. Acad. Sci., 64 (3) : 218-24

Daily movement of channel catfish, *Ictalurus punctatus* (Rafinesque), in a farm pond

BA 40E (1) 4227.

AQUATIC STOCKS

- Slicher, A. M. & J. N. Ball** (1962)* F
8-12403
Amer. Zool., 2 (3) : 107

Evidence for pituitary-adrenal mediation of leucocytosis induced by cold shock in fishes

Immersion in ice-water elicited marked leucopenia in intact male *Fundulus heteroclitus* and *Mollienesia latipinna*, followed by leucocytosis. Intraperitoneal injections of ACTH (Li) in *Fundulus* produced leucopenia in *Fundulus*, cortisol (5 µg/gwt) induced leucopenia in regressed fish but leucocytosis in breeding fish and in hypophysectomized individuals. Thus pituitary-adrenal axis implicated in bi-phasic cold shock response, but experiments with hypophysectomized fish have demonstrated that only the second phase depends on the pituitary.

- Ushakov, B. P., A. M. Vinogradov & A. A. Kusakina** (1962) F
8-12404
Zh. obshch. Biol., 23 (1) : 56-63

Tsitofiziologicheskii analiz vnutrinidnoi differentsirovki omulei i khariussov ozera Baikal (Cytophysiological analysis of intraspecies differentiation in the whitefish and grayling of lake Baikal)

BA 40E (1) 4229. Experiments were conducted on the north Baikal, Selenginsk, and Posolsk types of Baikal whitefish (*Coregonus autumnalis migratorius*, Georgi) and also on the black (*Thymallus arcticus baicalensis* Dyb.) and the white (*Th. a. baicalensis* infrasubspecies *brevipinnus* Svetovidov) Baikal grayling.

- Koroleva, N. V.** (1963) F
8-12405
Dokl. Akad. Nauk SSSR, 149 (5) : 1185

Izmenenie soderzhaniia belka v syvorotke krovi raduzhnoi foreli v zavisimosti ot vozrasta i pitaniia (Variation of protein content in the blood serum of the trout, as dependent on age and nutrition)

- Carswell, D. J. A.** (1963) F
8-12406
New Scient., 18 (333) : 41-2
Jugged coypu?

Note on its edibility.

- Capon, P. F.** (1963) F
8-12407
New Scient., 18 (333) : 42-3
A fish out of home water

- Baker, B. I.** (1963) F
8-12408
C.R. Acad. Sci., Paris, 256 (15) : 3356-8

Comportement en culture organotypique des cellules de l'hypophyse de la truite (Behaviour of organotypic culture hypophysis cells of trout)

Preliminary note on results of experiments using cells from *Salmo fario* in three developmental phases.

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Prowse, G. A. (1963)
New Scient., 17 (331) : 652
 Fish out of home water

F
 8-12409

Remarks on the introduction of fish to areas where they are not indigenous; gives examples on *Tilapia mossambica* in Malacca.

Podubský, V. (1959)
Sborn. čsl. Akad. zeměd. Věd. živ. Vjár., 4 (32) : 921-30
 Über das Hungern der Fische (Starving of fishes). Ru En

F
 8-12410

Reports on experiments carried out with 20 fish species.

Dyk, V. (1961)
 Praha, Československá Akademie Zemědělských Věd : 404 p.
 Nemoci ryb (Diseases of fishes)

F
 8-12411

Important handbook, very useful for pond fish culture. Introductory parts describe: economical importance of combating fish diseases, history of this branch of knowledge, classification of diseases, the effects of the environmental factors and culture activities on the health status of fish. The main parts contain descriptions of routine investigations, anatomy and pathology of fish, bacterial and viral diseases, pesticides, parasites of fish, both external and internal, dietary diseases, diseases of roe and larvae, anomalies in body structure, diseases of senile age. Finally the review of progress in combating fish diseases as well as bibliography is given.

MacKay, H. H. (1963)
 Canada, Toronto Bryant Press Ltd., 300 p.
 Fishes of Ontario

F
 8-12412

The book presents essential information on the identification, distribution, biology and habitat requirements of the 30 more important species belonging to 14 families. Introductory data, scientific and common names of fish, notes on conservation and managements.

Čihář, J. & O. Oliva (1959)
Sborn. čsl. Akad. zeměd. Věd. živ. Vjár., 4 (32) : 889-92
 (Growth of bream in the Slapy Reservoir) Ru De En

F
 8-12413

In comparison with other waters growth of *Abramis brama* is very good in the Slapy Reservoir.

Ball, J. N. & A. M. Slicher (1963)
Nature, Lond., 196 (4861) : 1331-2

F
 8-12414

Influence of hypophysectomy and of an adrenocortical inhibitor (SU-4885) on the stress-response of the white blood cells in the teleost fish, *Mollienesia latipinna* Le Sueur

AQUATIC STOCKS

- Prowse, G. A.** (1963) F
8-12415
Nature, Lond., 197 (4872) : 1123
 Introductions of exotic fish

Ci 61-184me. It was recommended that a register of introductions of exotic fish should be compiled by FAO and that institutions and scientific workers should be asked to assist in this. Author has undertaken to compile list of all introductions of *Tilapia* spp. into countries where they are not indigenous.

- Pequin, L. & A. Serfaty** (1962) F
8-12416
C.R. Soc. Biol., Paris, 156 : 1167-71

Blood ammonia of fresh-water teleosts following emersion and extreme anoxia

CA 58 (4) : 3711.

- Yoshioka, H.** (1962) F
8-12417
Bull. Fac. Fish. Hokkaido, 13 (3) : 123-36

On the effects of environmental factors upon the reproduction of fishes.
 1. The effects of day-length on the reproduction of the Japanese killifish, *Oryzias latipes*

Histological observations on the gonads of fish maintained at steady temperature and exposed to constant number of hours of light per day.

- Shirai, K.** (1962) F
8-12418
Bull. Fac. Fish. Hokkaido, 13 (3) : 137-52

Correlation between the growth of the ovipositor and ovarian conditions in the bitterling, *Rhodeus ocellatus*

Histological observations on the gonads.

- Tachi, C.** (1962) F
8-12419
Zool. Mag., Tokyo, 71 (10) : 322-7

(Effects of ionizing radiations upon the sodium metabolism in goldfish, *Carassius auratus* (preliminary report). Ni En

Experimental determination of the net sodium loss of irradiated goldfish compared with that from non-irradiated goldfish.

- Egami, N. et al.** (1962) F
8-12420
Zool. Mag., Tokyo, 71 (10) : 313-21

(Relationship between survival time after exposure to X-rays and dose of the irradiation in the fishes, *Carassius auratus* and *Oryzias latipes*). Ni En

Experimental measurement of the time to death at different levels of irradiation.

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Kobayasi, H. & T. Maeda (1962)

F
8-12421

Zool. Mag., Tokyo, 71 (10) : 307-12

(On the pharyngeal bones and their teeth in Japanese leuciscine and cyprinine fishes (Cyprinidae)). Ni En

Ill. morphological description.

Hardy, C. J. (1963)

F
8-12422

N.Z.J. Sci., 6 (1) : 107-19

An examination of eleven stranded redds of brown trout (*Salmo trutta*) excavated in the Selwyn River during July and August, 1960

Counts were made of the number of egg pockets in each redd, and of the number of ova per pocket and per redd, and note is made of the approximate dimensions of each redd and the position of each egg pocket.

Weatherley, A. H. (1963)

FG
8-12423

Nature, Lond., 197 (4874) : 1253

Notions of niche and competition among animals, with special reference to freshwater fish

Er 8-10511.

MISCELLANEOUS AND AUXILIARIES

Anon. (1962)

M
8-12424

Science, 136 (3522) : 1109

[Announcements]

Incl. announcement of post-doctoral fellowships for basic research on systematics and ecology of marine organisms, at Woods Hole.

Queensland. Laws, Statutes, etc. (1962)

M
8-12425

Qd Govt Gaz., (56) : 1579

Order in council amending orders in council made under the fisheries acts 1957 to 1962.—20 December 1962

Amends the orders in council of 14 Mar. 1957, 31 Aug. 1961, 20 Sep. and 15 Nov. 1962, and authorizes the taking of sprats, anchovies, pilchards, herrings or hardiheads by the use of a bait net as prescribed.

Queensland. Laws, Statutes, etc. (1962)

M
8-12426

Qd Govt Gaz., (56) : 1579-80

Order in council amending orders in council made under the fisheries acts 1957 to 1962.—20 December 1962

Amends the orders listed in the schedule, by authorizing the taking of herrings, hardiheads or prawns by the use of a cast (or "umbrella") net, and the taking of sprats, anchovies, pilchards, herrings or hardiheads by a bait net, as prescribed.

MISCELLANEOUS AND AUXILIARIES

South Australia. Laws, Statutes, etc. (1962)

M
8-12427

S. Aust. Govt Gaz., (52) : 1755

Proclamation, made under the fisheries act, 1917-1962, relating to prohibition of use of fish nets in certain waters.—20 December 1962

Prohibits in the prescribed waters the taking of fish by nets other than a hand crab net. Amends the proclamation of 11 Mar. 1948.

Caméroun, Federal Republic of. Laws, Statutes, etc. (1962)

M
8-12428

J. off. Caméroun, (14) : 781

Décret 62-DF-236 définissant les limites des zones de navigation à la pêche.—7 juillet 1962 (Decree 62-DF-236 defining the limits of the sea-fishing zones.—7 July 1962)

Made under ordinance No. 62-OF-30 of 31 Mar. 1962 instituting a code of the Cameroon merchant navy. Provides for three zones as follows: coastal fishing, open sea fishing and high-sea fishing.

Caméroun, Federal Republic of. Laws, Statutes, etc. (1962)

M
8-12429

J. off. Caméroun, (15) : 848-51

Décret 62-DF-276 portant réorganisation des services de la marine marchande.—25 juillet 1962 (Decree 62-D5-276, reorganising merchant shipping services.—25 July 1962)

Setting up, within the ministry of transport, of the Cameroon merchant shipping service. This federal service is competent in matters of merchant shipping, sea fishing and inland navigation.

Chile. Laws, Statutes, etc. (1962)

M
8-12430

Diario ofic., Santiago, (25.427) : 2728

Decreto No. 592 por el que se deroga el decreto No. 598, de 1960 y reemplaza el No. 837, de 1957.—6 de noviembre de 1962 (Decree No. 592 rescinding decree No. 598 of 1960 and replacing decree No. 937 of 1957.—6 November 1962)

Ci 61-02824. Lays down the membership of the Chilean section of the standing committee on the use and conservation of the marine resources of the South Pacific.

Chile. Laws, Statutes, etc. (1962)

M
8-12431

Diario ofic., Santiago, (25.429) : 2822

Decreto No. 670 por el que se deja sin efecto la prohibición o veda a que se refiere el número 618 de 11 de julio de 1961.—11 de diciembre de 1962 (Decree No. 670 cancelling the prohibition or closed season referred to in article 3 of supreme decree No. 618 of 11 December 1962)

Article 3 of the decree concerned prohibition of the catching, between 1 Nov. and 15 Feb. each year throughout the country, of the mollusc *Venus thaca*.

M

Denmark. Laws, Statutes, etc. (1962)

8-12432

Lovtidende A, (28) : 938

Lov for Faerøerne Nr. 328 om pantsætning af fangst.—2 november 1962 (Act for the Faroe Islands No. 328, concerning the pawning of catch.—2 November 1962). *Da*

M

Denmark. Laws, Statutes, etc. (1962)

8-12433

Lovtidende A, (30) : 961

Bekendtgørelse Nr. 357 om skovlvodsfiskeri om natten i Tannis bugt.—14 november 1962 (Notice No. 357, concerning shovel net (plaice trawl) fishing by night in Tannis Bay.—14 November 1962). *Da*

For the specified area, grants exception to the prohibition of the use of shovel nets (plaice trawl) by night until 31 Jan. 1963. A minimum mesh width is prescribed.

M

Germany. Federal Republic. Laws, Statutes, etc. (1962)

8-12434

MinistBl. Bundesrepub. Dtsch., (1) : 11-5

Richtlinien für die Gewährung von Bundesdarlehen zur Förderung der kleinen Hochsee und Küstenfischerei.—6. Dezember 1962 (Directions for the granting of federal loans for the promotion of small-scale high-seas fishing and coastal fishing.—6 December 1962)

For the modernization of fishing craft and equipment.

M

Germany. Federal Republic. Laws, Statutes, etc. (1962)

8-12435

MinistBl. Bundesrepub. Dtsch., (2) : 30-1

Allgemeine Verwaltungsvorschrift zur Aufsicht über die Durchführung der Arbeitsschutzvorschriften des Seemannsgesetzes.—28. Dezember 1962 (General administrative provisions relative to supervision of the execution of work protection provisions of the seafarers' act.—28 December 1962)

Prescribes functions of work protection authorities and collaboration between such authorities and the seafarers' trade union.

M

Germany. Federal Republic. Laws, Statutes, etc. (1963)

8-12436

BundesgesBl., Bonn, 1 (2) : 17

Verordnung über die Einstufung der pflichtversicherten selbständigen Küstenschiffer in die Beitragsklassen der Rentenversicherung der Arbeiter.—8. Januar 1963 (Order relative to the inclusion of compulsorily insured coastal fishermen in the contributing categories of workers pension insurance.—8 January 1963)

With retroactive effect as from 1 March 1957.

MISCELLANEOUS AND AUXILIARIES

Greece. Laws, Statutes, etc. (1961)

Ephem. Kybern., 1 (78) : 860-1

(Royal decree No. 267, on the standardisation of sardines, anchovies and other small salted fish.—29 April 1961). *He*

Repeals and replaces royal decree No. 409 of 11 Jun. 1960 on same subject. NE 61-05836.

M

8-12437

Mali. Laws, Statutes, etc. (1962)

J. off. Mali, (131) : IV-VI

Décret n° 263 P.G.-R.M.-A.E.-P. fixant les valeurs mercuriales pour le calcul des droits d'entrée et taxe *ad valorem* à percevoir à l'importation des produits au Mali pendant la période allant du 1er novembre 1962 au 30 avril 1963.—14 novembre 1962 (Decree No. 263 P.G.-R.M.-A.E.-P. fixing the market values for the calculation of import duties and the *ad valorem* tax on the import of products into Mali during the period 1 November 1962 to 30 April 1963.—14 November 1962)

Incl. canned sardines.

M

8-12438

Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)

J. off. Répub. Maur., (101/102) : 461

Décret n° 62.174 du 26 juillet 1962, relatif à l'organisation et au fonctionnement du service de la marine marchande et des pêches maritimes (Decree No. 62.174 relative to the organisation and operation of the merchant marine and sea fisheries service.—26 July 1962)

Said service to fulfil its tasks within the framework of act No. 62.038 laying down the merchant marine and sea fisheries code.

M

8-12439

Morocco. Laws, Statutes, etc. (1962)

Bull. off. Emp. chérif., (2610) : 1536

Dahir n° 1-62-101 du 24 octobre 1962 relatif aux conditions d'octroi ou de maintien de la nationalité marocaine à certains navires de pêche (Dahir No. 1-62-101, relating to conditions for the grant or continuation of Moroccan nationality for certain fishing craft.—24 October 1962). *Es*

An authorization by the minister of merchant marine is required.

M

8-12440

Morocco. Laws, Statutes, etc. (1962)

Bull. off. Emp. chérif., (2610) : 1552

Dahir n° 1-62-101 du 24 octobre 1962 relatif aux conditions d'octroi ou de maintien de la nationalité marocaine à certains navires de pêche (Dahir No. 1-62-101, relating to conditions for the grant or continuation of Moroccan nationality for certain fishing craft.—24 October 1962). *Es*

An authorization by the minister of merchant marine is required.

M

8-12441

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Norway. Laws, Statutes, etc. (1962) M
8-12442
Norsk Lovtid., (6) : 85

Kong. resolusjon om endr. i Kronsprinsregentens res. av 24. mars 1961 om norske trålers fiske i området mellom 4 og 6 n. mil utenfor grunnlinjene.—9. februar 1962 (Royal resolution amending the Regent's resolution of 24 March 1961 concerning fishing by Norwegian trawlers in the zone between the fourth and sixth nautical mile from base lines.—9 February 1962). *No*

Restricts the application of the trawl fishing act of 20 April 1951 within said zone.

Norway. Laws, Statutes, etc. (1962) M
8-12443
Norsk Lovtid., (22) : 426

Kongelig resolusjon om forbud mot å bruke lys ved snurpenotfiske etter sild og fisk i Finnmark.—8. juni 1962 (Royal resolution prohibiting light fishing for herring and other fish in Finnmark.—8 June 1962). *No*

Valid until 1 May 1964.

Norway. Laws, Statutes, etc. (1962) M
8-12444
Norsk Lovtid., (35) : 744

Kongelig resolusjon om forbud mot fangst av gullflyndre i Røst.—12. oktober 1962 (Royal resolution concerning the prohibition of the fishing of sole in Røst municipality.—12 October 1962). *No*

In force until 1 September 1964.

Norway. Laws, Statutes, etc. (1962) M
8-12445
Norsk Lovtid., (36) : 760

Kongelig resolusjon om forbud mot fiske med trål i Finnmark fylke mellom 4 og 6 nautiske mil utenfor grunnlinjene.—19 oktober 1962 (Royal resolution prohibiting fishing with trawl in Finnmark Fylke between 4 and 6 nautical miles beyond the coastline.—19 October 1962). *No*

From 1 Nov. 1962 to 1 Mar. 1963.

Norway. Laws, Statutes, etc. (1962) M
8-12446
Norsk Lovtid., (39) : 806

Kongelig resolusjon em endr. av resolusjon av 26. januar 1962 om maskevidden i tralnetor m.v.—9. november 1962 (Royal resolution amending the royal resolution of 26 January 1962 concerning mesh widths of trawl nets, etc.—9 November 1962). *No*

In respect of tolerances until 1 January 1964.

Peru. Laws, Statutes, etc. (1962) M
8-12447
Peruano, (6482) : 4

Decreto supremo No. 36 por el que se modifica el artículo 815 del reglamento de capitánías y marina mercante sobre licencias para operar en el litoral.—29 de noviembre de 1962 (Supreme decree No. 36 amending article 815 of the maritime authorities and merchant marine regulations on licences to operate in coastal waters.—29 November 1962)

Fixes the cost of licences for foreign ships, including fishing vessels, operating in Peruvian coastal waters.

South Africa, Republic of. Laws, Statutes, etc. (1962) M
8-12448
Govt Gaz. S. Afr., (402) : 5-6

Goewermentskennisgewings No. 2100. Wet op reëling van uitvoer van bederfbare produkte, 1962—heffings op bederfbare produkte.—21 Desember 1962 (Government notice No. 2100, made under the perishable products export control act, 1926 (No. 53 of 1926), relative to imposition of levies on perishable products.—21 December 1962). *Af*

Covers fish, shell-fish and crustaceans.

Sweden. Laws, Statutes, etc. (1962) M
8-12449
Svensk FörfSaml., (579) : 1607-8

Kungl. Maj:ts Kungörelse Nr 579 om undantag från förbudet mot trålfiske vid rikets östra kust.—23 november 1962 (Royal order No. 579, concerning exceptions from the prohibition of trawl fishing on the east coast of the country.—23 November 1962). *Sv*

Notwithstanding the prohibition of trawl fishing in § 5 of fisheries act No. 607 of 24 Sep. 1954, such fishing may take place in the periods Jan.—Apr. and Oct.—Dec. 1963 in certain specified areas.

Tunisia, Laws, Statutes, etc. (1962) M
8-12450
J. off. tunis, (53) : 1224

Loi n° 62-35 du 16 octobre 1962, modifiant le décret du 26 juillet 1951, portant refonte de la législation de la police de la pêche maritime et délimitation des eaux territoriales de la République Tunisienne (Act No. 62-35, amending the decree of 26 July 1951, revising the legislation on the control of sea fishing and defining the territorial waters of the Republic of Tunisia.—16 October 1962)

Redefines territorial waters and fixes at 12 miles the width of the fishing zone.

U.K. Laws, Statutes, etc. (1962) M
8-12451
Stat. Instr., U.K., (1452) : 2 p.

The sea fisheries (Scotland) byelaw (No. 65) 1962.—7 May 1962

Permits, on certain conditions, the use of a trawl net for the capture of Norway lobsters in certain waters in the Firth of Clyde.

- U.K. Laws, Statutes, etc. (1962)** M
8-12452
Stat. Instr., U.K., (1962) : 1 p.

The oil in navigable waters (extension of convention) (Netherlands Antilles) order 1962.—2 October 1962

The international convention for the prevention of pollution of the sea by oil 1954 shall extend to the Netherlands Antilles.

- U.K. Laws, Statutes, etc. (1962)** M
8-12453
Curr. Law Statut. annot. U.K., 10 & 11 Elizabeth 2, Chap. 31 : 35 p.

Sea fish industry act, 1962: an act to make further provision, by way of financial assistance and otherwise, with respect to the white fish and herring industries, including provision relating to the white fish authority and the herring industry board; to make further provision for the regulation of fishing for, and the landing and commercial use of, sea-fish, and with respect to shell-fish; to enable the charges leviable at certain harbours to be varied, and to facilitate borrowing for certain harbour and marine work undertakings; and for purposes connected with the matters aforesaid.—3 July 1962

Repeals the white fish and herring industries act, 1961, dated 9 May 1961. NE 62-01073.

- U.K. Laws, Statutes, etc. (1962)** M
8-12454
Statut. Instrum. U.K., (2742) : 2 p.

The sea-fishing industry (landing of immature cod and haddock) order 1962.—17 December 1962

Prohibits the landing of under-sized cod and haddock.

- U.S. Laws, Statutes, etc. (1962)** M
8-12455
Treat. inc. Acts Ser. U.S.A., (5094) : 9 p.

Measures in furtherance of principles and objectives of the Antarctic treaty. Recommendations adopted at the first consultative meeting under article IX of the Antarctic treaty.—24 July 1961

Inter alia recommendation I/VIII concerning need for conservation of living resources in treaty area and including "general rules of conduct for preservation and conservation of living resources in Antarctica".

- U.S. Laws, Statutes, etc. (1962)** M
8-12456
Publ. Laws, U.S.A., (87-814), 87th Congress, S 2568, 4 p.

An act to amend the act of September 7, 1950 "tuna conventions act of 1950", to extend the regulatory authority of the federal and state agencies concerned under the terms of convention for the establishment of an inter-American tropical tuna commission, signed at Washington May 31, 1949, and for other purposes.—15 October 1962

Regulations required to carry out recommendations of the commission shall be promulgated upon approval of such recommendations by the secretary of state and the secretary of the interior.

M
8-12457

Dennel, R. (1963)
Nature, Lond., 197 (4871) : 950-1
Prof. H. Graham Cannon, F.R.S.

Obituary

M
8-12458

Woods Hole Oceanographic Institution (1961)
Massachusetts, 101 p.
Bibliography of reports, 1950-60

Available from the Office of Technical Services, Department of Commerce,
Washington, D.C.

MF
8-12459

Waters, J. H. (1962)
Science, 137 (3526) : 283-4

Animals used as food by late archaic and woodland cultural groups in
New England

Gives some idea of exploitation of fish and invertebrates, especially molluscs.

MF
8-12460

Sport Fishing Institute, Washington, D.C. (1961)
Items Fish. Sci. Sport Fish. Inst., December : 2 p.

Contains notes on research grants for pollution control; comments by W. E.
Ricker on yield potential of fish stocks; NAS register of American scientists
interested in overseas assignments; work by S. Snieszko on diagnosis of visceral
granuloma in hatchery brook trout.

MF
8-12461

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz., N.S.W., (126) : 3709-10

Amendment of regulations made under the fisheries and oyster farms act,
1935-1960.—15 November 1962

Deletes and replaces regulation 17 and prescribes the length of net and the
size of mesh which may be used for taking fish by the method of hauling in the
waters specified.

MF
8-12462

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz., N.S.W., (126) : 3714

Amendment of regulations made under the fisheries and oyster farms act,
1935-1960.—19 November 1962

In respect of fees for fishing craft licences, for the import of live fish, etc.

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MF
8-12463

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz., N.S.W., (124) : 3632

Proclamation made under the fisheries and oyster farms act, 1935, as amended, relating to certain waters of the Evans River, and of the South Pacific Ocean, County of Richmond.—21 November 1962

Ci 61-08658. Prohibits the taking of fish (a) by means of nets of every description; (b) by hauling nets as prescribed in regulation 17, in the tidal waters and during the periods specified. Repeals the proclamation of 7 December 1960.

MF
8-12464

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz., N.S.W., (128) : 3780

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to the whole of the waters of Manly Lagoon, County of Cumberland, Parish of Manly Cove.—28 November 1962

Prohibits the taking of fish by nets of every description, in the tidal waters specified, from 1 Mar. 1963 to 29 Feb. 1968.

MF
8-12465

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz., N.S.W., (1) : 2

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Harrington Lagoon, Manning River, County of Macquarie.—5 December 1962.

Prohibits in the described waters, from 5 Dec. 1962 to 4 Dec. 1967, the taking of fish by means of spears, spearguns and similar devices and nets of every description other than the prescribed dip or scoop net for the capture of prawns only.

MF
8-12466

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz., N.S.W., (1) : 1

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Sussex Haven and St. George's Basin, County of St. Vincent.—12 December 1962

Prohibits the taking of fish by nets of every description other than the dip or scoop net prescribed by regulation 25 when used for the capture of prawns only, during the periods specified, beginning 1 Feb. 1963 and ending 31 Jan. 1968.

MF
8-12467

New South Wales. Laws, Statutes, etc. (1962)
Govt Gaz., N.S.W., (1) : 1-2

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Sussex Haven and St. George's Basin, County of St. Vincent.—12 December 1962

Prohibits in the tidal waters and during the periods specified, the taking of fish (a) by means of spears, spearguns and similar devices; (b) by means of meshing nets, as prescribed by regulation 23; (c) by nets of every description.

Austria. Laws, Statutes, etc. (1963)

MF
8-12468

BundesgesBl. Öst., (9) : 44-5

Kundmachung: Verlaut des Beschlusses Nr. 18/1962 des Rates der Europäischen Freihandelsassoziation über einen neuen ursprungsbegründenden Verarbeitungsvorgang für Fischernetze.—8 Feber 1963 (Proclamation of the office of the federal chancellor publishing decision No. 18/1962 of the European Free Trade Association relative to a new qualifying process for fishing nets.—8 February 1963)

Decision taken on 18 Dec. 1962 on the basis of the convention relative to the creation of the European Free Trade Association.

Quebec. Laws, Statutes, etc. (1962)

MF
8-12469

Statut. Quebec, 10-11, Eliz. II, 1962 : 163-6

Loi instituant le ministère de la chasse et des pêcheries.—14 mars 1962 (An act to establish the department of game and fisheries.—14 March 1962)

Describes composition and functions.

Chile. Laws, Statutes, etc. (1962)

MF
8-12470

Diario ofic., Santiago, (25.370) : 2239-40

Decreto No. 1828 por el que se fijan normas para establecer los precios para los artículos de primera necesidad o de uso o consumo habitual.—17 de octubre de 1962 (Decree No. 1828 laying down rules for the fixing of prices for articles of prime necessity and habitual use and consumption.—17 October 1962)

Includes fisheries preserves.

Chile. Laws, Statutes, etc. (1962)

MF
8-12471

Diario ofic., Santiago, (25.428) : 2742-808

Decreto No. 4961 por el que se pone en vigencia la lista nacional de Chile conforme al Tratado de Montevideo y se concede ventajas a productos originarios de Paraguay y Ecuador.—12 de diciembre de 1962 (Decree No. 4961 giving effect to the national list of Chile in accordance with the treaty of Montevideo and granting privileges to products imported from Paraguay and Ecuador.—12 December 1962)

Shows a long list of products, including fisheries products, to which a special tariff is applicable when originating not only from Paraguay and Ecuador but from all countries of the Latin American Free Trade Association.

Denmark. Laws, Statutes, etc. (1962)

MF
8-12472

Lovtidende A, (27) : 927-8

Bekendtgørelse Nr. 319 om varer, for hvilke der er meddelt undtagelse fra afgiftspligten efter loven om almindelig omsætningsafgift.—3 oktober 1962 (Notice No. 319, concerning goods exempted from taxes under the act concerning the general transactions tax.—3 October 1962). *Da*

Among the goods declared duty free: packing materials for fishing products, especially for export; rope and other fishing material.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

Denmark. Laws, Statutes, etc. (1962) MF
8-12473
Lovtidende A, (28) : 933

Bekendtgørelse Nr. 326 om foderblandinger til fisk.—24 oktober 1962
(Notice No. 326, concerning compound fish feeds—24 October 1962). *Da*

In respect of labelling.

Finland. Laws, Statutes, etc. (1962) MF
8-12474
Finl. FörfattnSaml., (218-221) : 411

Lag N:o 220 angående ändring av lagen om fiske.—9 mars 1962 (Act No. 220, amending the fishing act.—9 March 1962). *Su*

Provides for an annual state appropriation for the promotion of fishing.

France. Laws, Statutes, etc. (1962) MF
8-12475
J. off. Répub. franç., (265) : 10872

Décret n° 62-1306 réglementant les conditions techniques d'exercice des commerces de produits de la mer et d'eau douce.—6 novembre 1962 (Decree No. 62-1306 regulating technical conditions for the exercise of trade in marine and fresh-water products.—6 November 1962)

Authorizes specified authorities to regulate, by order, the transport, exposure for sale, preparation, storage and delivery of such products.

France. Laws, Statutes, etc. (1962) MF
8-12476
J. off. Répub. franç., (295) : 12245

Arrêté du 24 novembre 1962 relatif à la coloration du caviar et des suc-cédanés de caviar (Order relating to the colouring of caviar and caviar substitutes.—24 November 1962)

Caviar and caviar substitutes are added to the list of products which may be coloured under the order of 25 March 1958.

Germany, Eastern. Laws, Statutes, etc. (1962) MF
8-12477
GesBl. dtsh. dem. Repub., 2 (7) : 34

Zweite Verordnung über die Zahlung von Ausgleichsbeträgen an Mitglieder und Beschäftigte landwirtschaftlicher und gärtnerischer Produktionsgenossenschaften sowie von Produktionsgenossenschaften werktätiger Fischer.—19. Dezember 1962 (Second order relative to the grant of compensatory payments to members and employees of agricultural and gardening co-operatives and production co-operatives of professional fishermen.—19 December 1962)

Germany. Federal Republic. Laws, Statutes, etc. (1962) MF
8-12478
MinistBl. Bundesrepub. Dtsch., (1) : 11

Bekanntmachung Nr. 33-62/63 betreffend Übernahme von Fischmehl aus der Union der Sozialistischen Sowjetrepubliken.—21. Dezember 1962 (Notification No. 33-62/63 relative to the acquisition of fishmeal from the Union of Socialist Soviet Republics.—21 December 1962)

Mali. Laws, Statutes, etc. (1961)

MF
8-12479

J. off. Mali, (108) : VII-VIII

Loi n° 61-132 A.N.-R.M. du 31 décembre 1961 portant modification des quotités des droits et taxes fiscaux d'importation en République du Mali (Act No. 61-132 A.N.-R.M. amending the amounts of fiscal import duties and taxes in the Republic of Mali.—31 December 1961)

Applies to long list of products including fish and crustaceans.

Mali. Laws, Statutes, etc. (1961)

MF
8-12480

J. off. Mali, (108) : XV

Loi n° 61-125 A.N.-R.M. du 31 décembre 1961, portant création d'une taxe spéciale de consommation sur les produits et marchandises d'importation (décret de promulgation n° 04 P.G.-R.M. du 13 janvier 1962) (Act No. 61-125 A.N.-R.M. establishing a special consumption tax on imported products and goods (Promulgation decree No. 04 P.G.-R.M. of 13 January 1962).—31 December 1961)

Including fresh and frozen fish.

Mali. Laws, Statutes, etc. (1962)

MF
8-12481

J. off. Mali, (113) : 254-6

Décret n° 66 P.G.-R.M. du 2 mars 1962, portant création et fixant les modalités du contrôle du conditionnement des produits de l'agriculture, de l'élevage, des eaux et forêts et des industries agricoles du Mali (Decree No. 66 P.G.-R.M. establishing and laying down the terms for the control of the preparing, grading and packing of the products of agriculture, stock-breeding, waters and forests, and agricultural industries of Mali.—2 March 1962)

Provisions of a general nature. Products included are not specified.

Mali. Laws, Statutes, etc. (1962)

MF
8-12482

J. off. Mali, (123) : 492-5

Arrêté n° 581 S.E.E.F. du 28 juin 1962, fixant l'organisation et les modalités générales de fonctionnement du service du contrôle du conditionnement des produits de l'agriculture, de l'élevage, des eaux et forêts et des industries agricoles (Order No. 581 S.E.E.F. laying the organization and general terms of operation of the preparing, grading and packing control service for the products of agriculture, waters and forests and agricultural industries.—28 June 1962)

Provisions of a general nature. Products included are not specified.

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Mali. Laws, Statutes, etc. (1962) MF
8-12483
J. off. Mali, (131) : II-IV

Décret n° 262-P.G.R.M.-A.E.-P. fixant les valeurs mercuriales pour le calcul des droits de sortie et taxe *ad valorem* à percevoir à l'exportation des produits du Mali, pendant la période allant du 1^{er} novembre 1962 au 30 avril 1963—14 novembre 1962 (Decree No. 262 P.G.R.M.-A.E.-P. fixing the market values for calculation of export duties and the *ad valorem* tax on the export of products from Mali during the period 1 November 1962 to 30 April 1963.—14 November 1962)

Incl. fish, crustaceans and molluscs.

Netherlands. Laws, Statutes, etc. (1962) MF
8-12484
Staatscourant, Den Haag, (242 Suppl.) : 3-4

In- en uitvoerbeschikking produktschap voor vis en visprodukten 1963/Nr. J. 2653.—2 november 1962 (Order No. J. 2653 relative to Import-Export Association for fish and fish products.—2 November 1962). *Ne*

The new order repeals a similar order of 1958.

Norway. Laws, Statutes, etc. (1962) MF
8-12485
Norsk Lovtid., (22) : 425-6

Kongelig resolusjon om endr. i resolusjon av 22. desember 1955 om saltvannsfiskeriene.—8 juni 1962 (Royal resolution amending the resolution of 22 December 1955 on saltwater fishing.—8 June 1962). *No*

Change of closed seasons and of closed areas.

Peru. Laws, Statutes, etc. (1962) MF
8-12486
Peruano, (6451) : 2

Resolución ministerial No. 4965 por la que se aprueba el reglamento del decreto supremo No. 11 de 29 de agosto de 1962, sobre fábricas de harina de pescado.—27 de septiembre de 1962 (Ministerial resolution No. 4965 approving the regulation to supreme decree No. 11 of 29 August 1962 relative to fishmeal plants.—27 September 1962)

Extensive provisions concerning the granting of licences, technical inspections to be carried out, and the transfer and registration of fishmeal plants, supreme decree No. 11 referred to above has not yet been published in *Peruano*.

Spain. Laws, Statutes, etc. (1962) MF
8-12487
Bol. ofic. Estado, Madr., (254) : 14955-7

Orden de 9 de octubre de 1962 por la que se aprueban las normas complementarias que regulan la aplicación de la de obras públicas de 4 de septiembre de 1959 que reglamentaba el vertido de aguas residuales (Order approving the supplementary rules regulating the application of the order of the ministry of public works of 4 September 1959 regulating the evacuation of residual waters.—9 October 1962)

Provisions designed to avoid pollution.

MISCELLANEOUS AND AUXILIARIES

Sweden. Laws, Statutes, etc. (1962)

MF
8-12488

Svensk FörfSaml., (532) : 1519-21

Kungl. Maj:ts Kungörelse Nr 532 om de högsta införselavgifter som statens jordbruksnämnd må bestämma i vissa fall.—30 oktober 1962 (Royal order No. 532, concerning the maximum import tax which may be imposed by the ministry of agriculture in certain cases.—30 October 1962). *Sv*

Includes a variety of fishery products.

Sweden. Laws, Statutes, etc. (1962)

MF
8-12489

Svensk FörfSaml., (560-561) : 1580

Kungl. Maj:ts Kungörelse Nr 561 om upphävande av kungörelsen den 17 juni 1948 (nr 502) angående statsbidrag till vissa åtgärder för fiskets främjande.—16 november 1962 (Royal order No. 561 revoking royal order No. 502 of 17 June 1948 concerning state support for certain measures for fisheries development.—16 November 1962). *Sv*

Sweden. Laws, Statutes, etc. (1962)

MF
8-12490

Svensk FörfSaml., (580) : 1609-10

Kungl. Maj:ts Kungörelse Nr 580 angående ändring i kungörelsen den 21 november 1952 (nr 699) med vissa bestämmelser om storleken av maskor i fiskredskap av nät och om minimimått på fisk m.m.—23 november 1962 (Royal order No. 580, amending order No. 699 of 21 November 1952, containing certain regulations concerning the mesh width of fishing tackle and netting, the minimum size of fish, etc.—23 November 1962)

Measures effective until May 1966.

Switzerland. Laws, Statutes, etc. (1962)

MF
8-12491

Rec. Lois féd., Berne, (52) : 1697-743

Arrêté fédéral approuvant les accords tarifaires conclus par la Suisse avec les États-Unis d'Amérique et avec la Communauté économique européenne.—19 décembre 1962 (Federal order approving the customs tariff agreements concluded by Switzerland with the United States of America and the European Economic Community.—19 December 1962)

These agreements cover a wide range of products including fish and fisheries products.

Switzerland. Laws, Statutes, etc. (1962)

MF
8-12492

Rec. Lois féd., Berne, (52) : 1744-5

Arrêté du conseil fédéral concernant la mise en vigueur et l'exécution des accords tarifaires conclus avec les États-Unis d'Amérique et la Communauté économique européenne.—21 décembre 1962 (Order of the federal council relative to the coming into force and execution of the customs tariff agreements concluded with the United States of America and the European Economic Community.—21 December 1962)

These agreements come into force on 1 Jan. 1963.

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8-12493

U.K. Laws, Statutes, etc. (1962)

Stat. Instr., U.K., (1926) : 14 p.

The preservatives in food (Scotland) regulations 1962.—30 August 1962

Re-enact with amendments the public health (preservatives, etc., in food (Scotland)) regulations 1925 to 1958. Cover raw fish.

MF

8-12494

North Borneo. Laws, Statutes, etc. (1962)

Govt Gaz., 2nd Suppl., (S35) : 285-7

No. S. 159. The customs duties (exemption) (amendment No. 2) order 1962, made under the customs ordinance cap. 33.—10 December 1962

Various amendments, including ships, boats, barges, accessories thereof, etc.

MF

8-12495

U.S. Laws, Statutes, etc. (1962)

Fed. Reg. U.S., (208) : 10405

Executive order 11059 designating public international organizations entitled to enjoy certain privileges, exemptions, and immunities.—23 October 1962

Under authority of section 1 of the international organizations immunities act the Inter-American Tropical Tuna Commission, the Great Lakes Fishery Commission, and the International Pacific Halibut Commission are designated as public international organizations entitled to enjoy the privileges, exemptions, and immunities conferred by the international organizations immunities act, except those conferred pursuant to sections 4(b), 4(e), and 5(a) of that act.

MF

8-12496

Uruguay. Laws, Statutes, etc. (1962)

Diario ofc., (16461) : 360-A-363-A

Decreto por el que se da una nueva clasificación por grupos, de actividades comprendidas en la ley de consejos de salarios.—26 de julio de 1962 (Decree laying down a new group classification of activities included in the wages councils act.—26 July 1962)

The act concerned is No. 10.449 of 12 Nov. 1943. Industrial activities include fisheries.

MF

8-12497

Uruguay. Laws, Statutes, etc. (1962)

Diario ofc., (16461) : 364-A-365-A

Resolución por la que se dan a publicidad los resultados industriales en 1960.—1.º de agosto de 1962 (Resolution publishing the industrial balance sheet for 1960.—1 August 1962)

Includes fisheries.

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U.S. Laws, Statutes, etc. (1962) MF 8-12498
Publ. Laws U.S.A., (87-682), 87th Congress, H.R. 6413, 1 p.

An act to extend to fishermen the same treatment accorded farmers in relation to estimated income tax.—25 September 1962

Taxes, declaration by fishermen.

U.S. Laws, Statutes, etc. (1962) MF 8-12499
Publ. Laws U.S.A., (87-758), 87th Congress, H.R. 8181, 3 p.

An act to authorize the construction of a national fisheries center and aquarium in the district of Columbia and to provide for its operation.—9 October 1962

Sets up a national fisheries center and aquarium advisory board.

Upper Volta, Republic of. Laws, Statutes, etc. (1962) MF 8-12500
J. off. Haute-Volta, (25) : 576-81

Avis n° 456-CIAEM aux importateurs.—20 juin 1962 (Notification No. 456-CIAEM to importers.—20 June 1962)

Lays down the list of authorized imports from the European Economic Community for 1962. Includes fish, crustaceans and molluscs.

Davis, T. F. (1962) MF 8-12501
 Oak Ridge, Tenn., Atomic Energy Commission, 156 p.
 Radioactive waste processing and disposal. A literature search

Available from the Office of Technical Services, Department of Commerce, Washington, D.C.

Uchihashi, K., H. Shimamura & A. Honda (1963) MF 8-12502
Bull. Japan Sea Fish Res. Lab., (11) : 135
 (Application of Klüver staining method to the fish brain preparation).
Ni

Khoroshiko, P. N. (1961) F 8-12503
Ryb. Khoz., 4 : 22-3
 O ratsional'nom ispol'zovanii kormovykh zapasov Volgi (Efficient use of the stocks of fish food in the Volga)

BA 40E (1) 409.

Khoroshiko, P. N. (1961)* F 8-12504
Referat. Zh. (Biol.) (En Transl.), (8I62)
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En 8-12503.

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New South Wales. Laws, Statutes, etc. (1962)

8-12505

Govt Gaz. N.S.W., (128) : 3779

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Cato Creek in the vicinity of the aborigines' reserve, County of Narran.—28 November 1962

Prohibits the taking of fish by nets of every description, in the inland waters specified, from 1 Jan. 1963 to 31 Dec. 1967.

F

New South Wales. Laws, Statutes, etc. (1962)

8-12506

Govt Gaz. N.S.W., (128) : 3780

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Macleay River, Counties of Dudley, Macquarie, Clarke and Vernon.—28 November 1962

Prohibits the taking of fish by nets of every description other than the prescribed dip or scoop net and a 20 ft. hand-hauled net for the capture of prawns only, during the weekends, from 1 Mar. 1963 to 29 Feb. 1968.

F

New South Wales. Laws, Statutes, etc. (1962)

8-12507

Govt Gaz. N.S.W., (1) : 1

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the whole of the waters of Cawndilla Creek, County of Menindee.—5 December 1962

Prohibits the taking of fish by nets of every description, in the inland waters specified, from 17 Dec. 1962 to 16 Dec. 1967.

F

Denmark. Laws, Statutes, etc. (1962)

8-12508

Lovtidende A, (31) : 1007

Bekendtgørelse Nr. 390 om ophaevelse af fredningstiden for gedder.—18 december 1962 (Notice No. 390, concerning termination of the closed season for pike.—18 December 1962). *Da*

F

France. Laws, Statutes, etc. (1962)

8-12509

J. off. Répub. franç., (263) : 10792-6

Décret n° 62-1296 du 6 novembre 1962 portant règlement d'administration publique pour l'application de l'ordonnance du 25 novembre 1958 en ce qui concerne le stockage souterrain de gaz combustible (Decree No. 62-1296 issuing regulations for application of the ordinance of 25 November 1958, in respect of the underground storage of gas for fuel.—6 November 1962)

Articles 30 and 31 concern the protection of waters against pollution.

MISCELLANEOUS AND AUXILIARIES

F

Germany. Federal Republic. Laws, Statutes, etc. (1963) 8-12510
BundesgesBl., Bonn, 1 (3) : 21-43

Sechzehnte Verordnung zur Durchführung des Feststellungsgesetzes.—14 Januar 1963 (Sixteenth order for the implementation of the taxation act, 16th taxation executory order.—14 January 1963)

In respect of fishing concerns, extension of areas, length of river section, area of ponds, etc.

F

Greece. Laws, Statutes, etc. (1962) 8-12511
Ephem. Kybern., 1 (157) : 1158

(Royal decree No. 626, relating to perch fishing in Orestias Lake.—28 September 1962). *He*

Repeals and replaces royal decrees of 13 Mar. 1941 and 4 Feb. 1953.

F

Italy. Laws, Statutes, etc. (1962) 8-12512
Gazz. uff. Repub. ital., (302) : 4776

Decreto ministeriale 14 novembre 1962 relativo alle restrizioni all'esercizio della pesca del persico-trota nella provincia di Como (Ministerial decree restricting the fishing of black bass in the province of Como.—14 November 1962). *It*

Prohibits the fishing of *Grystes salmoides* Gunther from 15 May to 15 Jun.

F

U.S. Laws, Statutes, etc. (1962) 8-12513
Publ. Laws U.S.A., (87-830), 87th Congress, H.R. 10617, 1 p.

An act providing that the United States district courts shall have jurisdiction of certain cases involving pollution of interstate river systems, and providing for the venue thereof.—15 October 1962

F

U.S. Laws, Statutes, etc. (1962) 8-12514
Fed. Reg. U.S., (234) : 11952-3

Title 50 CFR—chapter 1—part 33: Sport fishing—Horicon National Wildlife Refuge, Wisconsin and Valentine National Wildlife Refuge, Nebraska.—26 November 1962

New § 33.5 : special regulations; sport fishing; for individual wildlife refuge areas.

F

U.S. Laws, Statutes, etc. (1962) 8-12515
Publ. Laws U.S.A., (87-614), 87th Congress, H.R. 1171, 2 p.

An act to assure continued fish and wildlife benefits from the national fish and wildlife conservation areas by authorizing their appropriate incidental or secondary use for public recreation to the extent that such is compatible with the primary purposes of such areas, and for other purposes.—28 September 1962

Includes provisions on land acquisition, acceptance of funds, and penalties.

BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

U.S. Laws, Statutes, etc. (1962)

F
8-12516

Publ. Laws U.S.A., (87-830), 87th Congress, H.R. 10617, 1 p.

An act providing that the United States district courts shall have jurisdiction of certain cases involving pollution of interstate river system, and providing for the venue thereof.—15 October 1962

In respect of interstate compacts.

Carr, J. B. C., J. C. Pinder & D. H. Sharp (1961)

F
8-12517

Fertil. Soc., 27 p.

Water and effluent—the law and the practice

WPA 36 (4) 667. Problems connected with the pollution of rivers including the bye-laws involved, the common law rights of riparian owners, and methods of meeting the legal requirements and the conservation of water supply of water during drought, and use of water for irrigation are discussed.

Zanobetti, D. (1963)

F
8-12518

New Scient., 18 (333) : 35-7

A computer model of the Mekong River

Thoma, J. A. (1962)

G
8-12519

Science, 137 (3526) : 278-9

Simple and rapid method for the coding of punched cards

Method based on phonetics of word is outlined. Utility of scheme lies in speed because of elimination of need of controlled index. Experience gained in operation of system is briefly described.

Snyder, R. L. (1963)

G
8-12520

Chesapeake Sci., 4 (1) : 60-1

Growth and regulation of animal populations

Re 62-04123.

Richmond, P. A. (1963)

G
8-12521

Science, 139 (3556) : 737-9

What are we looking for?

Attention to the nature of scientific discovery would produce better information retrieval systems. Scientific method is used in research. Research is defined as "the more or less systematic investigation of phenomena intended to add to the sum total of verifiable knowledge". This broad definition excludes experimentation of the trial-and-error type, or pure chance observation.

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Lambert, J. M. & W. T. Williams (1962)
J. Ecol., 50 (3) : 775-802

Multivariate methods in plant ecology

Developing a theory of associations.

G
8-12522

Broughton, W. B. (1963)
Nature, Lond., 197 (4866) : 428-30

Colour and life

G
8-12523

Short report on the thirteenth annual symposium of the Institute of Biology: "Colour and Life", at Birkbeck College, London. Deals with structural colours and chemical colours; colour and classification in lower plants; photosynthetic pigments; respiratory pigments and colour change in animals; colour perception and behaviour. Includes references on marine and fresh-water experiments.

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8-001me to 8-143 me

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| IWC (1963)
2nd Meeting of the scientific sub-committee | M
8-001me |
| NAS/NRC (US)/SCOR (ICSU) (1963)
Symposium on biogeochemistry | M
8-002me |
| American Institute for Fishery Research Biologists (1963)
Annual meeting | MF
8-003me |
| British Ecological Society/Association of Applied Biologists (1963)
Joint meeting on dispersal of animals and plants | G
8-004me |
| FAO (1963)
3rd Session of committee on pesticides | FG
8-005me |
| FAO (1963)
Meeting of working party on pesticide residues | FG
8-006me |
| OECD, Committee for scientific research on the causes of fouling and corrosion of ships' hulls and methods of prevention (1963)
Meeting of joint group to consider abstracting service to cover documentation on biological fouling and corrosion | M
8-007me |
| British Ecological Society (1964)
Winter and annual general meeting | G
8-008me |
| Challenger Society (1964)
217th Scientific meeting | M
8-009me |
| Challenger Society/Representatives from the Marine Laboratories (1963)
Joint meeting | M
8-010me |

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| UNESCO/Pakistan Academy of Sciences/Union of South Africa/CSIR (1964) | FM
8-011me |
| Symposium on scientific problems of the humid tropical zone deltas and their implications | |
| NAS (US) (1964) | M
8-012me |
| Tentative meeting of committee on oceanography | |
| North American Wildlife and Natural Resources Conference (1964) | MF
8-013me |
| Annual Meeting | |
| CIESMM (1964) | M
8-014me |
| Symposium on marine pollution by microorganisms and petroleum products | |
| British Ecological Society (1964) | MF
8-015me |
| Symposium on ecology and the industrial society | |
| CCTA, Guinean Trawling Survey, Scientific Committee (1964) | M
8-016me |
| 2nd Meeting | |
| CCTA/CSA (1964) | M
8-017me |
| CSA specialist meeting on crustaceans | |
| CARPAS (1964) | M
8-018me |
| 2nd Session | |
| Japanese Society of Scientific Fisheries (1964) | MF
8-019me |
| Symposium on the hormonal maturation and artificial control of the reproduction of fishes | |
| FAO (1964) | MF
8-020me |
| Symposium on the significance of fundamental research in successful utilization of fish | |
| ICNAF (1964) | M
8-021me |
| Meetings of the <i>ad hoc</i> group on herring and the assessment sub-committee | |
| ICNAF (1964) | M
8-022me |
| Meeting of the standing committee on research and statistics | |
| ICNAF (1964) | M
8-023me |
| Meetings of scientific advisors to panels | |

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ICNAF (1964) 14th Annual meeting	M 8-024me
FAO (1964) 1st Session of expert panel for the facilitation of tuna research	M 8-025me
International Fisheries Exhibition " Rich is the Sea " (1964)	M 8-026me
International Fisheries Trade Fair (1964) 5th International Fisheries Trade Fair	MF 8-027me
FAO (1964) Meeting on business decisions in fishery industries	MF 8-028me
Pacific Tuna Conference (1964) 15th Conference	M 8-029me
Eastern Pacific Oceanic Conference (1964) Meeting	M 8-030me
Gulf States Marine Fisheries Commission (1964) Meeting	M 8-031me
EIFAC (1964) 2nd Meeting of EIFAC working party on water quality criteria for European freshwater fishes	F 8-032me
University of Toronto, Great Lakes Institute (1964) 7th Conference on Great Lakes research	F 8-033me
EIFAC (1964) 3rd Session	F 8-034me
International Water Supply Association (1964) 6th International water supply congress and exhibition	F 8-035me
British Ecological Society (1964) Summer meeting on freshwater ecology	F 8-036me

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- ABZ** (1964) MG
29th Annual meeting 8-037me
- FAO** (1964) MF
Codex Alimentarius. Expert panel on standards for fish and fishery products 8-038me
- Sapelo Island Research Foundation Inc./University of Georgia Marine Inst./U.S. Bureau of Commercial Fisheries, Biological Laboratory, Brunswick, Georgia/Atlantic Estuarine Research Society/ASLO** (1964) MF
Conference on estuaries 8-039me
- UNESCO** (1964) Mme
Meeting of directors of North African marine laboratories and institutions 8-040
- IOC** (1964) M
Meeting of the international coordinating group for the International Cooperative Investigations of the Tropical Atlantic (ICITA) 8-041me
- ASLO** (1964) MF
27th Annual meeting 8-042me
- ASAB/American Society of Zoologists, Section on Animal Behaviour** (1964) MF
Symposium on learning and associated phenomena in invertebrates 8-043me
- Regional symposium on south-western Atlantic Ocean** (1964) M
8-044me
- ICSU/SCIBP** (1964) MF
1st General meeting on the International Biological Program 8-045me
- UNESCO** (1964) MF
(Conference on the organization of research and training of personnel in Africa, concerning the study, conservation and utilization of natural resources) 8-046me
- N.Y. Academy of Sciences/Eastern Fish Disease Laboratory, Bureau of Sport Fisheries and Wildlife, Leetown** (1964) MF
Conference on viral diseases of poikilothermic vertebrates 8-047me
- IPFC** (1964) MF
11th Session 8-048me

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INPFC (1964) 11th Session	MF 8-049me
GLFC (1964) Annual meeting	F 8-050me
ASAB (1964) Annual general meeting	G 8-051me
CIESMM (1964) International colloquium on pollution of the marine environment	M 8-053me
ICES 52nd Statutory meeting	M 8-054me
FAO (1964) Symposium on increasing fish consumption through improved fish handling and distribution	MF 8-055me
Denmark, Ministry of Foreign Affairs (1964) Intergovernmental meeting on a revised convention for the International Council for the Exploration of the Sea	M 8-056me
CIESMM (1964) 19th Plenary meeting	M 8-057me
WMO, Commission for Maritime Meteorology (1964) 4th Session	M 8-058me
SCOR (ICSU) General meeting	M 8-059me
SCOR (ICSU) (1964) Symposium on effect of variations in oceanic circulation on distribution of marine organisms	M 8-060me
UNESCO/IAPO (1965) Joint symposium on tide gauge instrumentation	M 8-061me
GFCM (1965) 8th Session	M 8-062me

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NEAFC (1965) 3rd Session	M 8-063me
IWC (1965) 17th Meeting	M 8-064me
Norway, Ministry of Fisheries (1965) 2nd Official Norwegian fisheries fair	MF 8-065me
ASAB (1964) Meeting on recording techniques in animal behaviour	G 8-066me
UN (1965) 2nd World population conference	G 8-067me
International Association for Quaternary Research (1965) 7th International congress	G 8-068me
IUCN (1964) Meeting of survival service commission	MF 8-069me
Göteborg. University. Marine Botanical Institute (1964) 5th Marine biological symposium	M 8-070me
ICES (1964) Round table discussion on the equation of state of sea water	M 8-071me
IOC (1964) 4th IOC bureau and consultative council meeting	M 8-072me
Indian Ocean Biological Centre (1965) Meeting of consultative committee	M 8-073me
Association of Island Marine Laboratories of the Caribbean (1965) 6th Meeting	M 8-074me
South Africa. Republic/CSIR/India Meteorology Department (1965) Symposium on IIOE meteorology	M 8-075me

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| SEASCO (1965)
3rd Regional meeting of experts from marine laboratories in the south east Asian region | M
8-076me |
| IOC (1965)
1st Meeting of the international co-ordinating group for the co-operative Kuroshio study | M
8-077me |
| IOC (1965)
Editorial committee on ICITA atlases | M
8-078me |
| IOC (1965)
Meeting of working group on the international aspects of Tsunami warning system in the Pacific | M
8-079me |
| ECOSOC (UN) (1964)
2nd Session of advisory committee on the application of science and technology to development | M
8-080me |
| IOC (1965)
Meeting of a joint IOC/WMO working group on ocean data stations | M
8-081me |
| UNESCO/SCOR/IAPO/ICES (1965)
Joint working group on oceanographic tables and standards | M
8-082me |
| IOC (1965)
5th IOC bureau and consultative council meeting | M
8-083me |
| U.A.R. Govt. (1964)
Aswan development conference | F
8-084me |
| WHO (1964)
Informal working meeting of representatives on conservation and amelioration of natural environments and research into pollution and measures for its control | MF
8-085me |
| Instituto Ecuatoriano de Ciencias Naturales (1964)
Simposio nacional de recursos naturales (National symposium on natural resources) | MF
8-086me |
| Challenger Society (1964)
Annual general meeting | M
8-087me |

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| Challenger Society (1964)
218th Scientific meeting | M
8-088me |
| Miami. University. Marine Laboratory (1964)
Introduction to the marine environment and description of the physical, chemical and geological aspects as related to marine microbiology. Introduction to marine microbiology | M
8-089me |
| Miami. University. Marine Laboratory (1964)
Marine phytoplankton; algae, diatoms, bluegreens; taxonomy and ecology | M
8-090me |
| FBA (UK) (1964)
Annual general meeting | F
8-091me |
| IUCN (1964)
Meeting of executive board | MF
8-092me |
| Miami. University. Marine Laboratory (1964)
Fungi and yeasts; distribution, physiology and ecology | M
8-093me |
| Challenger Society/Representatives from the Marine Laboratories (1964)
Joint meeting | M
8-094me |
| Miami. University. Marine Laboratory (1964)
Physiology and ecology of algae and protozoa | M
8-095me |
| OECD, Committee for scientific research. International co-operation in scientific research (1964)
Meeting of water pollution sub-group No. 5 on research on water for bathing, recreational purposes and water sports | MF
8-096me |
| Miami. University. Marine Laboratory (1964)
Marine bacteria, distribution, physiology, ecology and cycles of mineralization | M
8-097me |
| Miami. University. Marine Laboratory (1964)
Marine bacteria, cont., and economic aspects of marine microbiology | M
8-098me |
| U.S. Water Pollution Control Federation (1964)
2nd International conference on water pollution research | F
8-099me |

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Brazilian Academy of Sciences (1964) Symposium on the oceanography of the western south Atlantic	M 8-100me
Atlantic States Marine Fisheries Commission (1964) 23rd Annual meeting	MF 8-101me
FAO/WHO (1964) 2nd Session of Codex Alimentarius commission	G 8-102me
Challenger Society/Representatives from the Marine Laboratories (1964) Joint meeting	M 8-103me
GCFI/International Game Fish Conference (1964) Meeting	MF 8-104me
European Federation for Protection of Waters (1964) Symposium on water protection and country planning	F 8-105me
Council of Europe (1964) 3rd Meeting of the committee of experts for the protection of nature and landscape	G 8-106me
IUCN (1964) Meeting of executive board	MF 8-107me
OECD (1964) Session of Council	MF 8-108me
Commission Internationale des Industries Agricoles (1964) 1er Congrès international des industries agricoles et alimentaires des zones tropicales et sub-tropicales (1st International congress of agriculture and food industries in tropical and sub-tropical areas)	MG 8-109me
AAAS (1964) Meeting	MF 8-110me
Marine Biological Association of India (1965) Symposium on Crustacea	M 8-111me
SCIBP (1965) Meeting of sectional committee on the productivity of marine communities	M 8-112me

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| SCIBP (1965)
2nd Meeting | M
8-113me |
| IMCO (1965)
1st Session of sub-committee on oil pollution | M
8-114me |
| ACMRR (FAO) (1965)
Meeting of working group on direct and speedier estimation of fish abundance | M
8-115me |
| ACMRR (FAO) (1965)
3rd Session | M
8-116me |
| ACC (ECOSOC) (1965)
5th Meeting of sub-committee on oceanography | M
8-117me |
| Gulf States Marine Fisheries Commission (1965)
Meeting | MF
6-118me |
| SCOR (ICSU) (1965)
Meeting of working group 18 on biological data | M
8-119me |
| IOC/SCOR (ICSU)/ACMRR (FAO) (1965)
Meeting of the program committee for the 2nd international oceanographic congress | M
8-120me |
| SCOR (ICSU)/ACMRR (FAO)
Meeting of the joint working group on the general scientific framework for the world ocean study | M
8-121me |
| ICNAF (1965)
Meeting of assessment sub-committee | M
8-122me |
| ICNAF (1965)
Meeting of research and statistics committee | M
8-123me |
| ICNAF (1965)
15th Annual meeting | M
8-124me |
| IOC (1965)
2nd Meeting of the IIOE co-ordinating group | M
8-125me |

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SCOR (ICSU) (1965) Executive meeting	MF 8-126me
FAO (1965) 44th Session of Council	MF 8-127me
American Fisheries Society (1965) Meeting	MF 8-128me
IOC (1965) Meeting of working group on cooperative investigations of variability in the ocean	M 8-129me
IOC (1965) 4th Session	M 8-130me
GCFI (1965) Meeting	MF 8-131me
SCTR/OAU (1965) Meeting	G 8-132me
Polish Academy of Sciences (1965) 16th Limnological congress	F 8-133me
FAO/ICES/ICNAF (1965) Continuing working party on fishery statistics in the North Atlantic area	M 8-134me
FAO (1965) Meeting of ad-hoc committee of the FAO council on conference resolution No. 8/63	MF 8-135me
ICES (1965) 53rd Statutory meeting	8-136me
Marine Technology Society/ASLO (1965) Conference on ocean science and ocean engineering	8-137me
Conférence internationale sur les hautes pressions (1965)	8-138me
IUGG (1965) 2nd Symposium of CRCM	8-139me

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| UNESCO (1965) | M
8-140me |
| Meeting of experts to plan oceanographic studies in the Mediterranean | |
| UNESCO/Brazilian Academy of Sciences (1965) | M
8-141me |
| Meeting of Latin-American oceanographic laboratories and training centres | |
| ECOSOC (UN) (1965) | M
8-142me |
| 3rd Session of advisory committee on the application of science and technology to development | |
| ICSU/CIG (1965) | M
8-143me |
| 6th Geophysical meeting | |

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		01465	07271	07276		<i>Squatina</i>		05496
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 10080 10081 11026 11036
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2.4 *Physics of sea and fresh waters*

01068 01141 02151 03091
 03101 03104 03126 03157
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 05036 05044 05046 05422
 05423 06054 06060 06085
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 08049 09083 10077 10084
 10094 11016 11029 11044
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2.5 *Chemistry of sea and fresh waters*

01077 01082 01085 01104
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2.7 Waves, tides and water level

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 02071 02090 02102 02104
 02164 03054 03055 03058
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 07016 07017 07019 08042
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 10097 10099 12117

2.8 Ice

01057 02062 02103 03073
 03130 04044 04048 04049
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2.9 Coastal oceanography and limnology

01082 01119 01120 01131
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 01142 01143 01529 02066
 02080 02082 02109 02110
 02114 02117 02118 02119
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 12159 011me 133me

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 03071 03158 03168 03169
 03177 04110 04117 05083
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 05113 05115 05117 05124
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 12298 039 089me
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 02176 02180 02187 03152
 03153 03154 03159 03161
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 03174 03178 03180 03181
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 06175 06178 06179 06180
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 11103 11109 12165 12168
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3.3 Phytoplankton

01153 01155 01171
 01172 02082 02174 02175
 02177 02178 02179 02182
 02186 03118 03151 03155
 03157 03157 03160 03162
 03164 03171 03172 03173
 03182 03203 04095 04100
 04112 05077 05085 05089
 05090 05099 05130 05146
 05149 05150 05196 05234
 06151 06155 06158 06169
 06173 07098 07099 08096
 08097 08100 08104 08129
 08133 09096 09097 09106
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3.4 Nannoplankton

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3.5 Productivity

01062 01162 01175
 02084 02119 02174 02181

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03179 04103 05074 05131
05386 06153 06160 07104
07109 08103 08112 08114
09100 10127 10148 10155
11038 11077 11085 11094
11098 11100 12185

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4.1 *General* 01188 01252 01253 01373
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05153 05222 05261 06211
06212 06213 06241 06253
06269 07052 08154 08155
08159 08195 08202 08222
08237 09178 09180 09232
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4.2 Zoobenthos—Systematics and

development 01028 01177 01179
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01245 01329 01434 01497
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02195 02200 02203 to
02207 02209 02210 02211
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02230 02240 02347 02364
02374 02375 02383 02407
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05471 06022 06131 06140
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06359 06379 06475 07150
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09171 09177 09181 09184
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01376 01434 01461 01475
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05176	05179	05180	05181		02198	02208	02209
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| 03257 | 03258 | 04160 | 04239 | | 06291 | 06293 | to 06301 |
| to | 04244 | 04261 | 04271 | | 06309 | 06311 | 06313 06563 |
| to | 04274 | 04276 | 04278 | | 06564 | 06565 | 07184 07189 |
| 04279 | 04283 | 04284 | 04285 | | 07203 | 07348 | 08286 08305 |
| 04382 | 04384 | 04386 | 04408 | | to | 08378 | 08380 to |
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| 05221 | 05303 | 05305 | 05312 | | 09107 | 09304 | to 09312 |
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| 08280 | 08281 | 08284 | 08285 | | 12406 | 020me | 038me |
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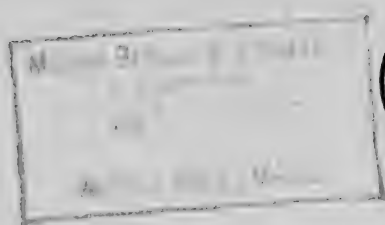
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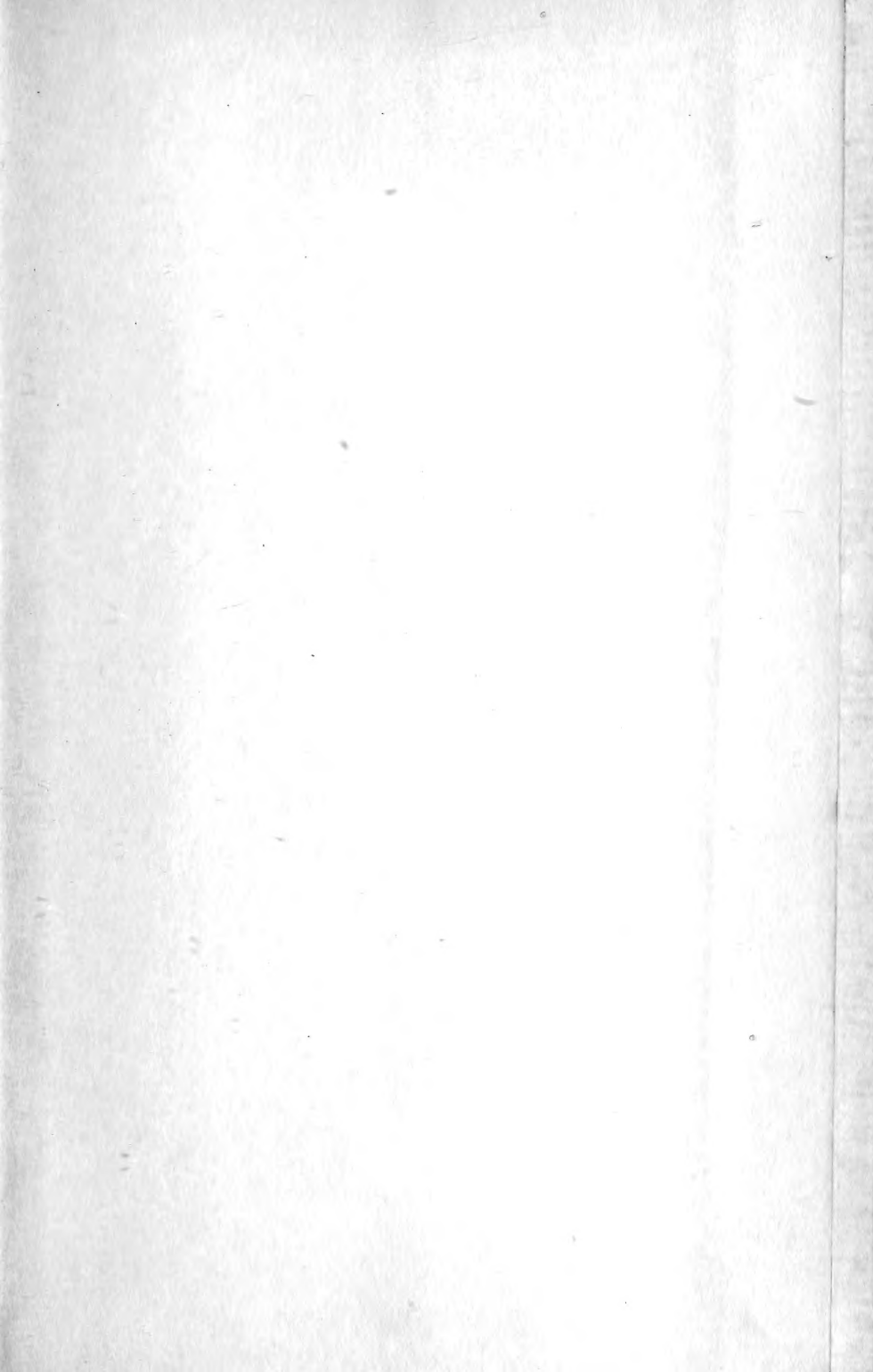
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